

CONNECTICUT DEPARTMENT OF PUBLIC HEALTH



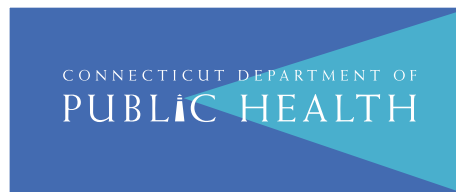
CONNECTICUT YOUTH TOBACCO SURVEY 2000

John G. Rowland, Governor
Joxel Garcia, M.D., M.B.A., Commissioner

CONNECTICUT DEPARTMENT OF
PUBLIC HEALTH

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APRIL, 2001

CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

INTRODUCTION

“Tobacco use is the single leading preventable cause of death in the United States, accounting for approximately 430,000 deaths each year... Approximately 80% of tobacco users initiate use before the age of 18 years. If the trend in early initiation of cigarette smoking continues, approximately 5 million children aged < 18 years who are living today will die prematurely as adults because they began to smoke cigarettes during adolescence. The economic liability associated with tobacco ranges from \$50 billion to \$73 billion per year in medical expenses alone. Because of these health and economic consequences, CDC has recommended that states establish and maintain comprehensive tobacco control programs to reduce tobacco use among youth.”

Centers for Disease Control and Prevention.
CDC Surveillance Summaries, October 13, 2000. MMWR 2000;49(No. SS-10)

The Connecticut Youth Tobacco Survey (CYTS) is the first ever comprehensive survey of tobacco use, access, cessation, knowledge and attitudes, and exposure among Connecticut youth. CYTS provides valuable baseline data to guide and evaluate youth tobacco use prevention efforts and cessation programs within our state. The Connecticut Department of Public Health conducted the CYTS in the spring of 2000 in cooperation with the Centers for Disease Control and Prevention (CDC), the Connecticut State Department of Education and countless partners from local school districts and local health departments.

The CYTS consists of 65 questions developed by the CDC for the National Youth Tobacco Survey. It was administered to a representative sample of Connecticut middle and high school students in both public and private schools. In all, 2,089 middle school students from 41 schools and 2,200 high school students from 46 schools completed the survey between March and June 2000. (See survey instrument and sampling design for more details.) Results are reported separately for middle school students (grades 6-8) and high school students (grades 9-12). Where sample size and prevalence rates allow, results are presented by gender and race/ethnicity (White non-Hispanic, Black non-Hispanic and Hispanic). To help the reader discern real differences between comparison groups, findings that are statistically significant at the $p \leq 0.05$ level are emphasized throughout this report as “significant” differences.

Since the majority of the measures presented in this report are baseline data, two references have been provided for comparison, where appropriate: *Healthy People 2010* objectives and National Youth Tobacco Survey results. *Healthy People 2010* (HP 2010) is a US Department of Health and Human Services national strategy for improving the health of the American people. HP 2010 includes 21 specific objectives related to reducing illness, disability, and death related to tobacco use and exposure to secondhand smoke. Unfortunately, most of the HP 2010 youth tobacco objectives relate only to high school students. The National Youth Tobacco Survey is a representative survey of 15,061 students in grades 6-12 attending public and private schools in the 50 states and the District of Columbia. The CDC conducted the survey in 1999. The National Youth Tobacco Survey results in this report were published in *CDC Surveillance Summaries*, October 13, 2000. MMWR 2000;49(No. SS-10).

This report is the first in an anticipated series of reports and fact sheets on data from the first Connecticut Youth Tobacco Survey.

ACKNOWLEDGEMENTS

The Connecticut Youth Tobacco Survey would not have been a success without the hard work and dedication of many, many individuals. First and foremost, we would like to thank the thousands of students who took part in the CYTS and completed the survey as well as the teachers who graciously administered the survey during their classes. Thank you as well to the school administrators and superintendents who recognized the value of this research effort and allowed their students to participate. The State Department of Education generously provided us with data for selecting and contacting schools. The Office on Smoking and Health at the Centers for Disease Control and Prevention was a constant source of technical advice and moral support, and contributed greatly to the analysis of survey results. Finally, a special thanks to all the friends of public health who pulled together to make phone calls, hand-deliver surveys and generate momentum for the project.

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We gratefully acknowledge the staff at the Health Education and Intervention Division of the Bureau of Community Health for their tremendous efforts to ensure the success of this project. The following Department of Public Health staff members were involved with school recruitment and CYTS data collection, and/or provided technical assistance and critical reviews of the text of this report.

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This study and publication were made possible by a cooperative agreement U1A/CCU109225 from the Centers for Disease Control and Prevention.



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EXECUTIVE SUMMARY

The Connecticut Youth Tobacco Survey (CYTS) was conducted in the spring of 2000. Anonymous responses from a representative sample of 4,289 Connecticut public and private school students in grades 6-12 were weighted and analyzed for this report. The survey contained 7 major content areas: demographics, tobacco use prevalence, age of initiation, access to tobacco, school, knowledge and attitudes, mass media influences and environmental tobacco smoke. The student responses were weighted based on probability of selection and to reflect the Connecticut student population. Responses were analyzed by school type (middle school or high school), gender, race/ethnicity, and grade. Due to the limited sample size and low prevalence for some measures, reliable estimates are not available for each measure by subgroup. For clarity, statistically significant ($p \leq 0.05$) findings are highlighted in the bullets accompanying the graphs.

The findings in this document show that tobacco use is a substantial problem among Connecticut youth starting at an early age, regardless of gender, race or ethnicity.

PREVALENCE

In past 30 days, almost 75,000 Connecticut middle and high school students have used at least one form of tobacco (cigarettes, smokeless tobacco, cigars, pipes or bidis). In other words, almost one-third (32.4%) of high school students and 13.1% of middle school students currently use some form of tobacco. Cigarettes are the most commonly used form of tobacco among Connecticut youth. In the past 30 days, 9.8% of middle school and 25.6% of high school students smoked cigarettes—58,400 students in all. The second most popular form of tobacco is cigars (6.1% of middle students and 12.7% of high school students), followed by bidis (3.7% and 6.0% respectively). A smaller percentage of students use pipes (2.6% of middle students and 4.2% of high school students) and smokeless tobacco (2.2% and 4.1% respectively). Tobacco use among Connecticut high school students exceeds *Healthy People 2010* (HP 2010) objectives for all forms of tobacco.

INITIATION

An estimated 21,600 middle and high school students in Connecticut smoked their first whole cigarette before the age of 11, with young boys being significantly more likely than girls to initiate smoking before age 11 (16.3% and 9.2% respectively). Among high school students, 80% of those who have ever smoked a whole cigarette first smoked between the ages of 11 and 16 years old.

ACCESS

In Connecticut, middle school smokers usually get their cigarettes by borrowing them or having someone else buy them; high school smokers usually obtain their cigarettes by purchasing them at a store or vending machine or by borrowing them. When students under the age of 18 tried to buy cigarettes in a store during the past 30 days, nearly 3 in 4 middle school and 1 in 2 high school current smokers in Connecticut were not asked to show proof of age. Almost 2 in 3 middle school and 1 in 2 high school underage current smokers were able to buy cigarettes at a store during the past 30 days.

SCHOOL

Approximately, 27,800 middle and high school students in Connecticut smoked on school property in the 30 days preceding this survey. In other words, 3.2% of middle school and 13.4% of high school students report smoking on school property in the past 30 days compared to 2.4% of middle school and 9.3% of high school students nationally. In the classroom, Connecticut students report fewer opportunities to practice ways to say “no” to tobacco as grade increases. In 6th grade, 56.3% of students report having practiced ways to say “no” to tobacco in class during the past school year; but by 12th grade, the number plummets to only 10.3%. This is alarming because at the same time current tobacco use (use within the past 30 days) increases from 4.8% in 6th grade to 36.0% in 12th grade.

CESSATION

Over 70% of middle and high school current smokers think they can quit smoking now if they wanted to, but only slightly over half (53.2% of middle school and 56.4% of high school) of current smokers want to quit. The percent of current smokers who have tried to quit within the past 12 months varies by grade between 41.0% and 65.7%. Most current smokers (53.9% of middle school and 63.8% of high school) have tried to quit at least once during their lives, and 18.8% of middle school and 22.9% of high school current smokers have unsuccessfully tried to quit 3 or more times. In fact, 1 in 2 middle school and 2 in 3 high school current smokers were unable to stay off cigarettes for at least 30 days during their last quit attempt. In Connecticut, fewer than 1 in 10 ever tobacco users in middle and high school have participated in a program to help them quit using tobacco; however, it is unclear whether this low usage rate is due to lack of youth cessation services, or barriers (such as cost, transportation or parental consent) to access to such services.

KNOWLEDGE & ATTITUDES

Approximately 41,800 middle and high school students in Connecticut who have never smoked are susceptible to starting smoking. Susceptibility, defined as lacking a firm commitment to not smoke and willingness to accept a cigarette if offered by a friend, is highest between 7th and 10th grade. Connecticut middle and high school students overwhelmingly (90%) believe that people can become addicted to tobacco; however, more than 1 in 2 middle school and nearly 1 in 3 high school current smokers believe that short term smoking, for one or two years, is safe. Also troubling is the fact that smoking seems to be more appealing to youth as they get older. Positive social perceptions of smoking (belief that smokers have more friends or look cool) decrease among current smokers between middle and high school; meanwhile, positive social perceptions of smokers actually increase from middle to high school among never smokers. Smoking also plays a role in the social networks of Connecticut youth, with smokers being much more likely than non-smokers to report that one or more of their four closest friends smoke. Lastly, while approximately 2 in 3 students have been warned about the dangers of smoking by their parents, they were slightly less than half as likely to hear anti-smoking messages from doctors and dentists.

MASS MEDIA

Connecticut students receive mixed messages about tobacco from mass media. While more than 80% of Connecticut middle and high school students have seen anti-tobacco ads in the past 30 days, over 79% have seen actors using tobacco on television or in the movies and almost 25% have seen athletes using tobacco on television. Students are also exposed to tobacco advertising on the Internet with current smokers being more likely than never smokers to see such ads, which would suggest targeted Internet use on behalf of the students or targeted advertising on behalf of tobacco promoters. Connecticut never smokers are over 1.7 times more likely than students nationally to have bought or received a tobacco company product during the past year and are 9 times more likely to wear or use products with tobacco company logos.

ENVIRONMENTAL TOBACCO SMOKE

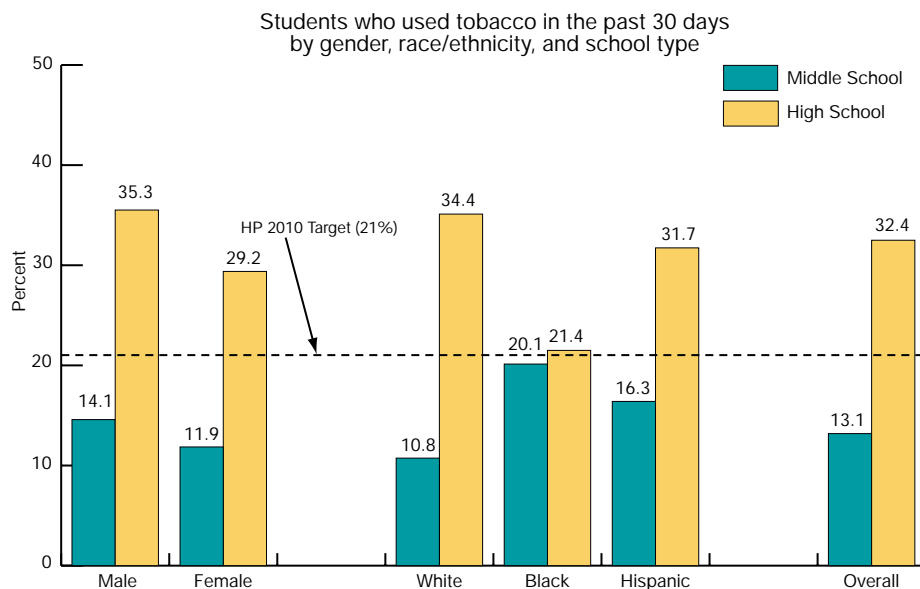
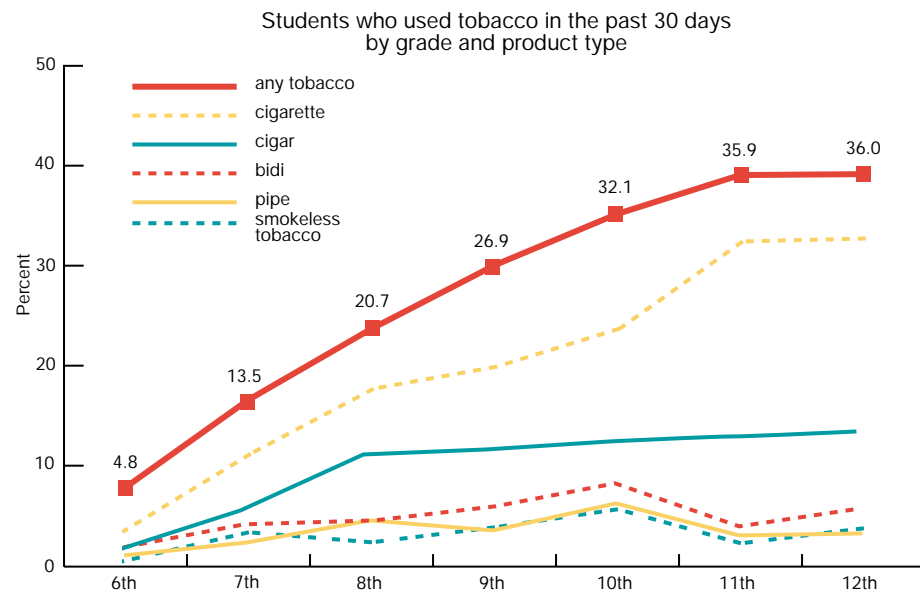
Connecticut students believe that environmental tobacco smoke (ETS) is harmful to them. More than 9 in 10 middle and high school students believe that secondhand smoke is definitely or probably harmful. However, 2 in 5 Connecticut middle and high school students (or 127,700) currently live with someone who smokes cigarettes. Current smokers in Connecticut, regardless of grade, are significantly and consistently much more likely than never smokers to live with someone who smokes cigarettes. Additionally, 199,500 Connecticut students (54.6% of middle and 79.2% of high school students) have been in the same room with someone who was smoking cigarettes during the past 7 days, and 145,100 students (39.5% of middle and 51.2% of high school students) rode in a car with someone who was smoking cigarettes on 1 or more of the past 7 days.

ANY TOBACCO USE

Students were asked about their use of different forms of tobacco including cigarettes, smokeless tobacco, cigars, pipes, and bidis.* Students were considered to be current tobacco users if they reported using any of these products within the past 30 days.

- 75,000 middle and high school students in Connecticut currently use tobacco
 - 13.1% or 18,600 middle school students and
 - 32.4% or 56,400 high school students
- Approximately 1 in 10 middle school students and 1 in 4 high school students currently smoke cigarettes
- 6.1% of middle school students and 12.7% of high school students currently smoke cigars
- Bidi use outranks pipe and smokeless tobacco use among both middle and high school students
- High school students are almost 3 times as likely as middle school students to currently use any form of tobacco
- The *Healthy People 2010* objective for tobacco is to reduce use among high school students to no more than 21%. In Connecticut tobacco use in high school ranges by grade from 26.9% to 36.0%

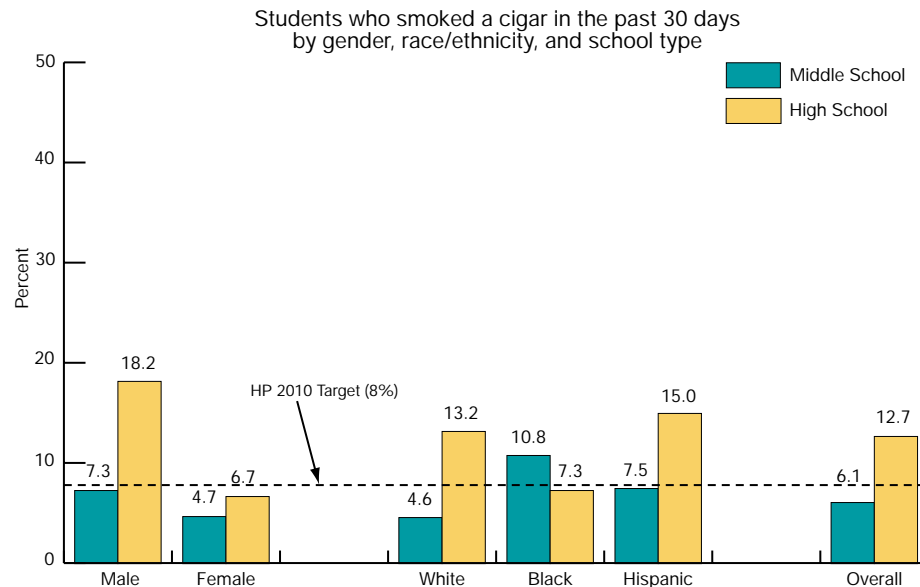
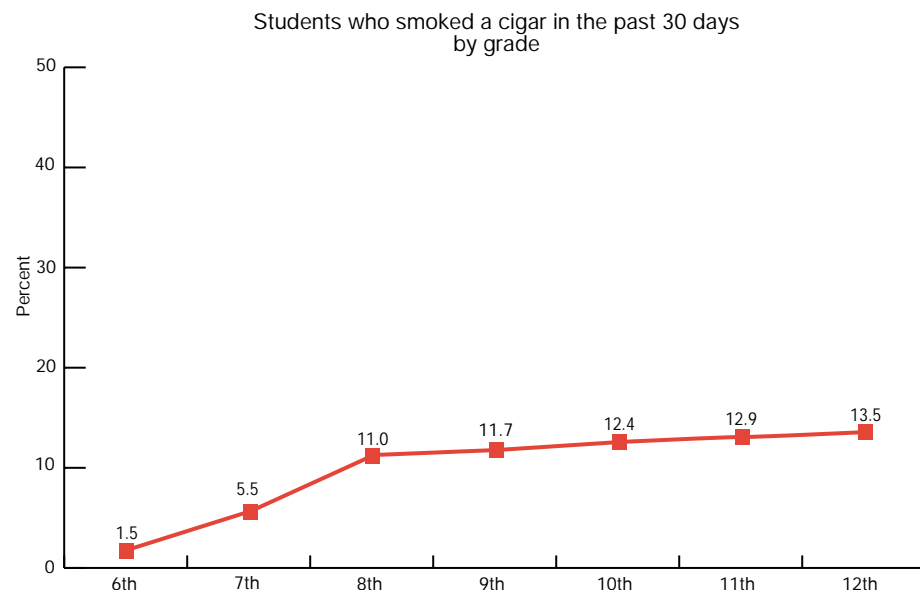
*Small, brown, hand-rolled cigarettes often tied with string made primarily in India and other Southeast Asian countries.



CIGAR SMOKING

Students were asked about their use of cigars, cigarillos, or little cigars during the past 30 days. Students were considered to be current cigar smokers if they had smoked on at least one of the past 30 days.

- 30,800 middle and high school students in Connecticut currently smoke cigars
 - 6.1% or 8,700 middle school students and
 - 12.7% or 22,100 high school students
- Cigar smoking rates among high school students are twice as high as rates in middle school students (12.7% and 6.1%). This jump in cigar smoking rates is largely attributable to high school boys whose rates are nearly triple those of their middle school counterparts
- Boys are more likely than girls to smoke cigars, especially in high school. Middle school rates are 7.3% and 4.7%, respectively, and high school rates are 18.2% and 6.7%, respectively
- In middle school, there are no significant differences in cigar smoking rates among Black, Hispanic, and White students
- In high school, White students (13.2%) are significantly more likely than Black students (7.3%) to smoke cigars. Although Hispanic students had the highest reported cigar smoking rate (15.0%), the number of students reporting is too low to make reliable conclusions about this estimate
- The *Healthy People 2010* objective for cigars is to reduce use among high school students to no more than 8%. In Connecticut cigar use in high school ranges by grade from 11.7% to 13.5%



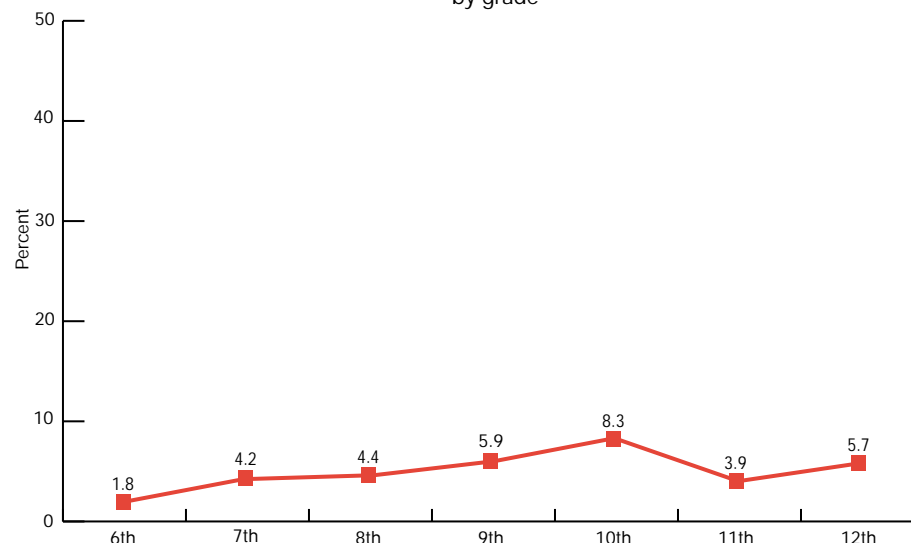
BIDI SMOKING

Bidis are small, brown, hand-rolled cigarettes primarily made in India and other southeast Asian countries consisting of tobacco wrapped in a tendu or temburni leaf. Bidis are sold in packages of 20 and are available in different flavors (e.g., cherry, chocolate, and mango).* Students were asked about their use of bidis during the past 30 days. Students were considered to be current bidi smokers if they had smoked a bidi on at least one of the past 30 days.

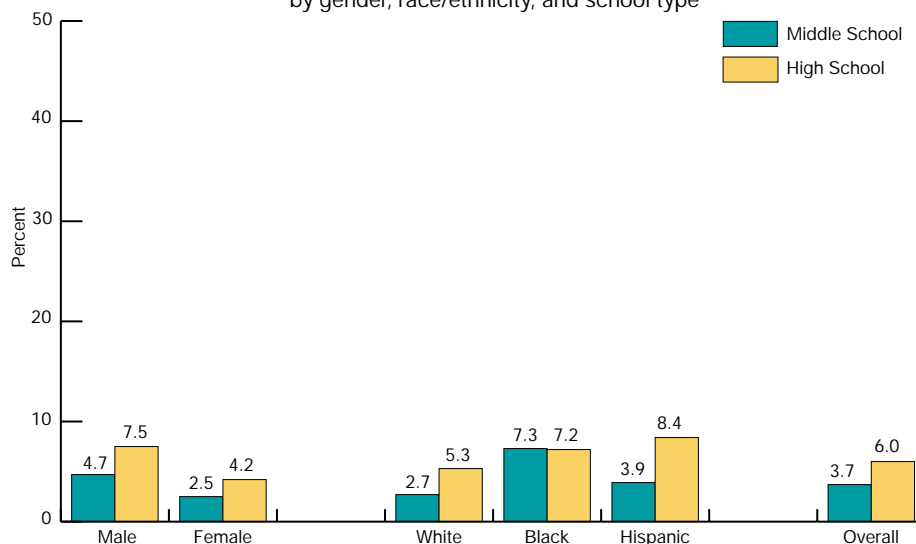
- 15,600 middle and high school students in Connecticut currently smoke bidis
 - 3.7% or 5,200 middle school students and
 - 6.0% or 10,400 high school students
- Bidi smoking rates increase significantly between middle and high school from 3.7% to 6.0%
- Boys are more likely than girls to smoke bidis. In middle school, the rates are 4.7% and 2.5%, respectively, and in high school, the rates are 7.5% and 4.2%
- There are no significant differences in bidi smoking rates among Black, Hispanic, and White students in middle or high school
- There are no *Healthy People 2010* objectives specifically addressing bidis, but they are noteworthy as an emerging form of tobacco use among youth and because they are often perceived as a healthy alternative to cigarettes. However, they produce higher levels of carbon monoxide, nicotine, and tar than cigarettes do when tested on a standard smoking machine*

*MMWR, "Bidi Use Among Urban Youth - Massachusetts, March-April 1999"
September 17, 1999 / 48(36): 976-799

Students who smoked bidis in the past 30 days
by grade



Students who smoked bidis in the past 30 days
by gender, race/ethnicity, and school type

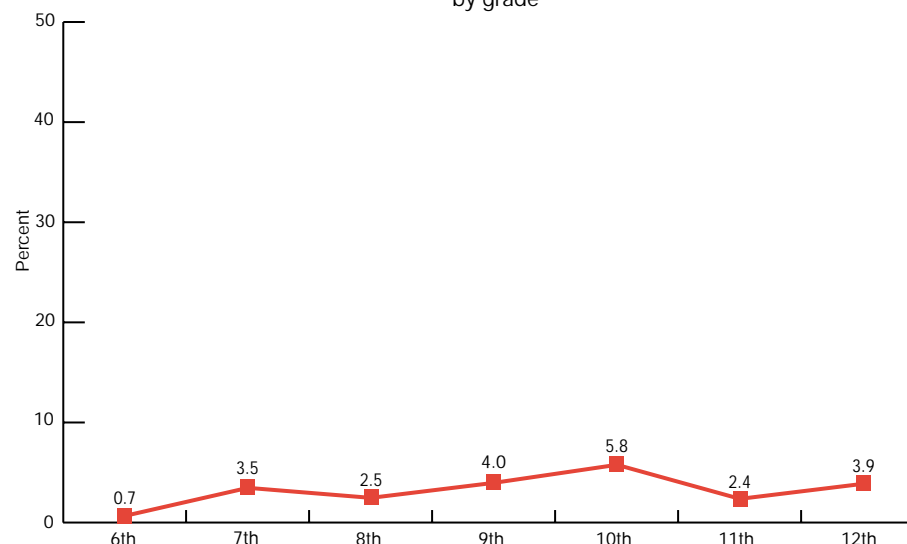


SMOKELESS TOBACCO USE

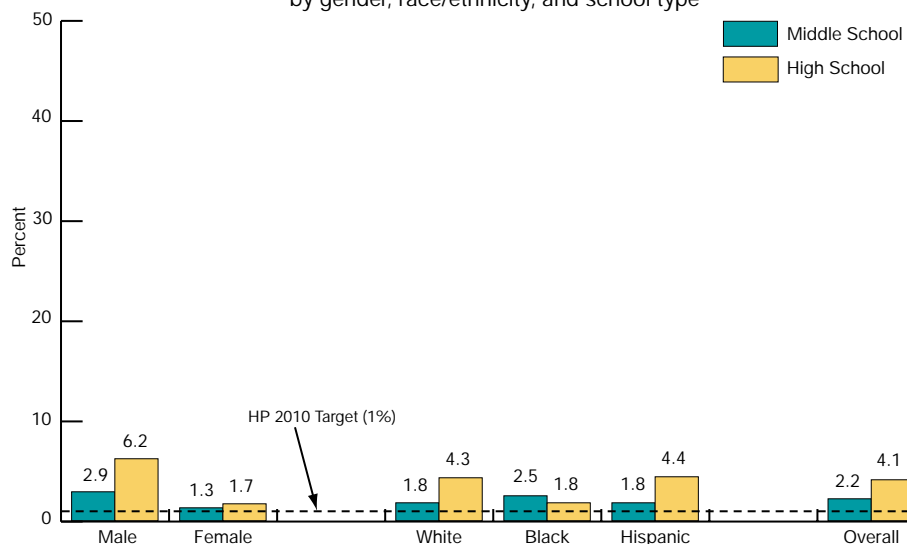
Students were asked about their use of chewing tobacco, snuff, or dip (such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen) during the past 30 days. Students were considered to be current smokeless tobacco users if they had used smokeless tobacco on at least one of the past 30 days.

- 10,200 middle and high school students in Connecticut currently use smokeless tobacco
 - 2.2% or 3,100 middle school students and
 - 4.1% or 7,100 high school students
- Smokeless tobacco use among high school students is almost twice as high as among middle school students (4.1% and 2.2%)
- In middle school, boys are more than twice as likely as girls to currently use smokeless tobacco (2.9% and 1.3%). In high school, boys are significantly more likely than girls to use smokeless tobacco (6.2% and 1.7%)
- There are no significant differences in smokeless tobacco use rates among Black, Hispanic, and White students in either middle or high school
- The *Healthy People 2010* objective for smokeless tobacco is to reduce use among high school students to no more than 1%. In Connecticut, smokeless tobacco use in high school varies by grade between 2.4% and 5.8%

Students who used smokeless tobacco in the past 30 days by grade



Students who used smokeless tobacco in the past 30 days by gender, race/ethnicity, and school type

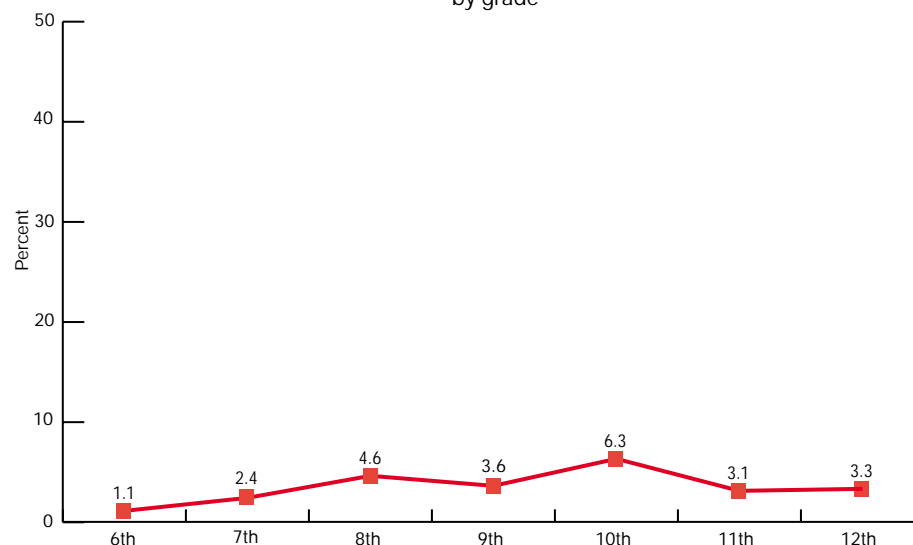


PIPE SMOKING

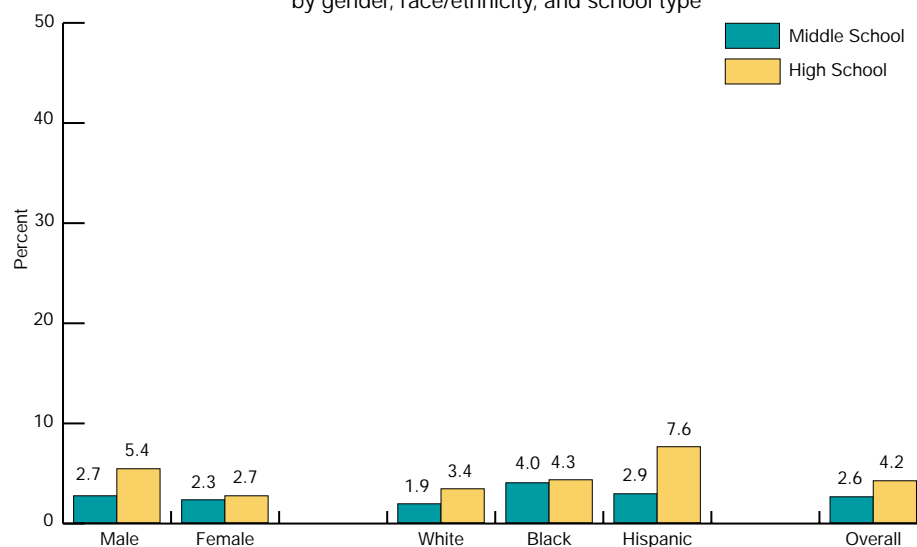
Students were asked about smoking tobacco in a pipe during the past 30 days. Students were considered to be current pipe tobacco users if they had smoked a pipe on at least one of the past 30 days.

- 11,000 middle and high school students in Connecticut currently smoke pipes
 - 2.6% or 3,700 middle school students and
 - 4.2% or 7,300 high school students
- Pipe tobacco use among high school students is more common than among middle school students (4.2% and 2.6%)
- In middle school, boys and girls are about equally likely to currently use pipe tobacco (2.7% and 2.3%). In high school, boys are twice as likely as girls to use pipe tobacco (5.4% and 2.7%)
- There are no significant differences in pipe tobacco use rates among Black, Hispanic, and White students in either middle or high school
- There are no *Healthy People 2010* objectives specifically for pipe tobacco use; however, it is important to monitor pipe use trends as part of comprehensive tobacco surveillance for youth

Students who smoked a pipe in the past 30 days by grade



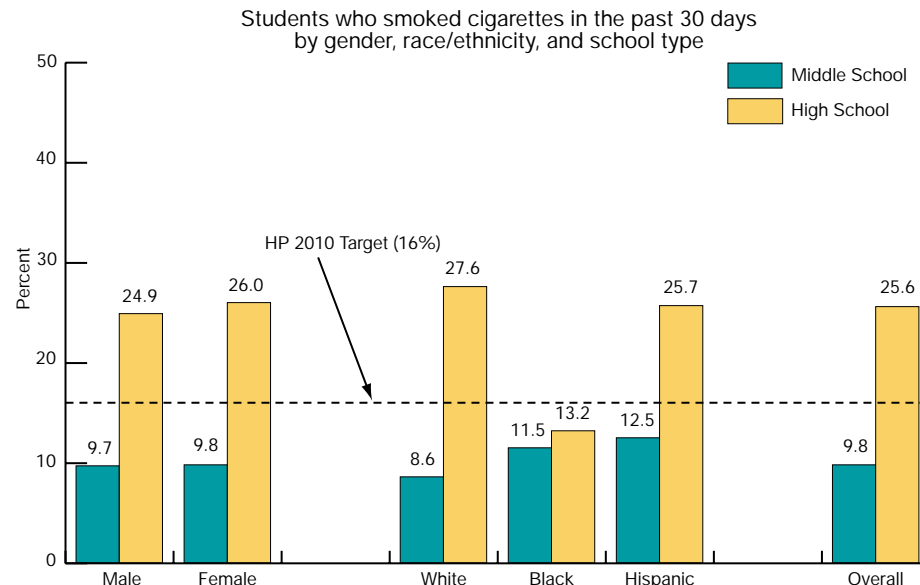
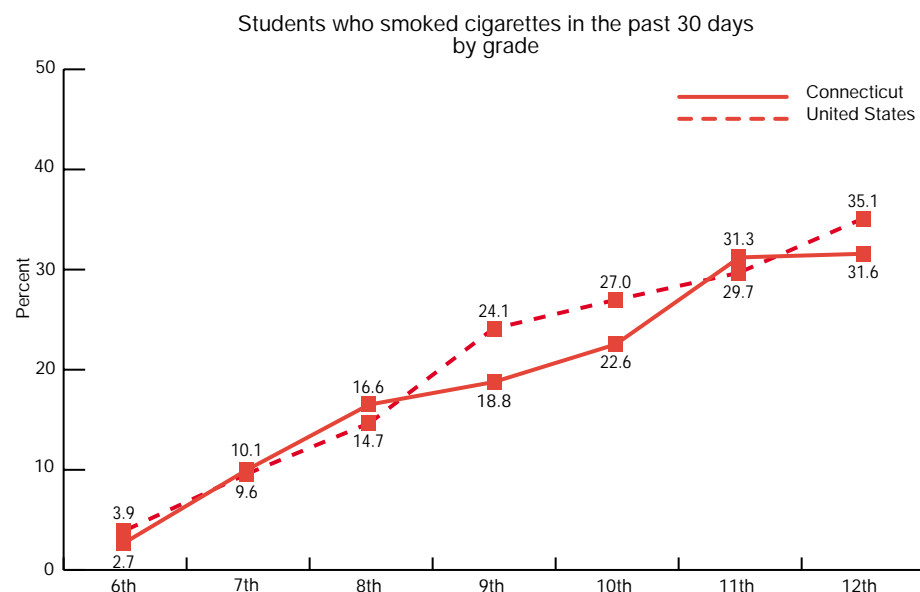
Students who smoked a pipe in the past 30 days by gender, race/ethnicity, and school type



CIGARETTE SMOKING

Students were asked about their use of cigarettes during the past 30 days. Students were considered to be current cigarette smokers if they had smoked cigarettes on at least one of the past 30 days.

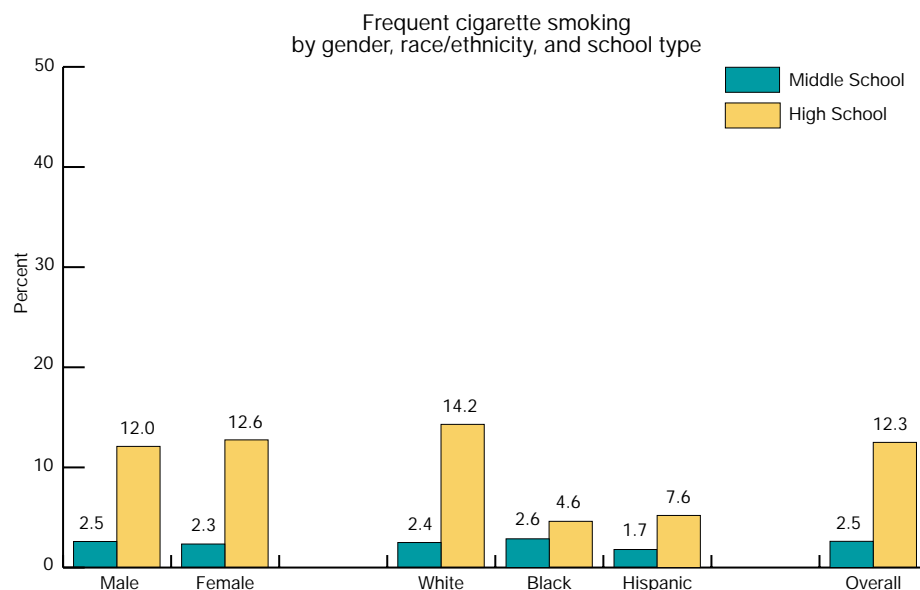
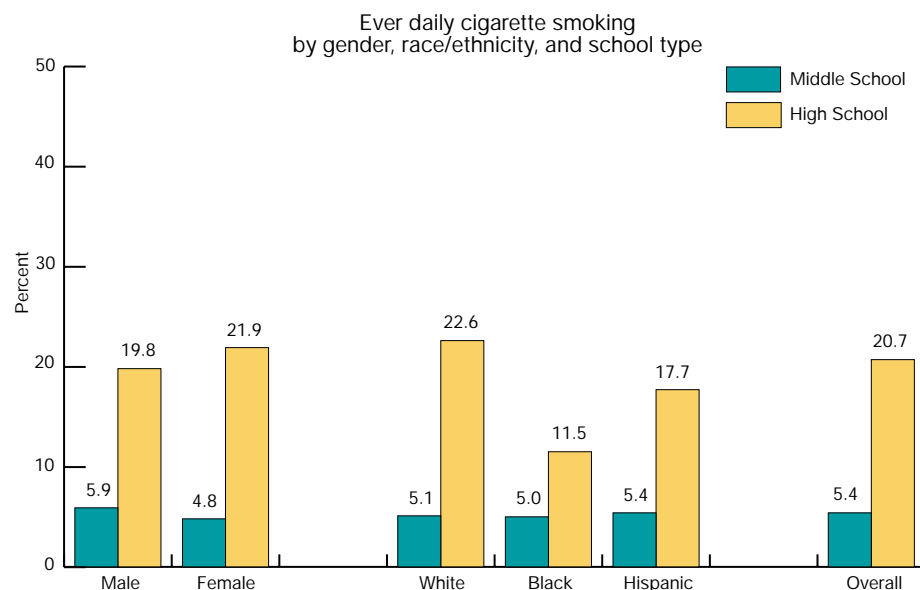
- 58,400 middle and high school students in Connecticut currently smoke cigarettes
 - 9.8% or 13,900 middle school students and
 - 25.6% or 44,500 high school students
- Current cigarette use by grade in Connecticut increases nearly 12-fold from 2.7% in 6th grade to 31.6% by 12th grade. Smoking by grade is similar to national cigarette smoking trends
- High school students are 2.6 times more likely than middle school students to be current cigarette smokers (25.6% and 9.8%)
- Boys and girls are equally likely to be current cigarette smokers in both middle school (9.7% and 9.8%) and high school (24.9% and 26.0%)
- In high school, White students are significantly more likely than Black students to smoke cigarettes (27.6% and 13.2%). Hispanics (25.7%) appear to be slightly less likely than Whites and slightly more likely than Blacks to smoke cigarettes, but they do not differ significantly from either group
- There are no significant differences in current cigarette smoking among Black, Hispanic, and White students in middle school
- The *Healthy People 2010* objective for cigarette smoking is to reduce use among high school students to no more than 16%. In Connecticut cigarette use in high school ranges by grade from 18.8% to 31.6%



ESTABLISHED CIGARETTE SMOKING

Two measures were used to assess established smoking patterns: ever daily smoking and frequent cigarette smoking. Ever daily smokers smoked at least one cigarette per day for 30 days at some point in their lives. Frequent smokers smoked cigarettes on 20 or more of the past 30 days. Since ever daily smoking is a lifetime measurement, percentages are higher than frequent smoking, which covers only the past 30 days.

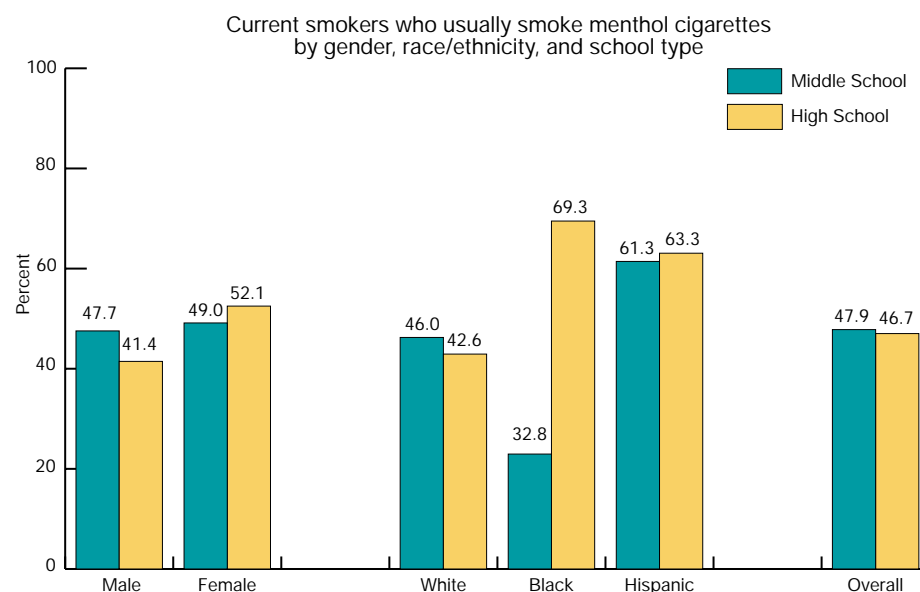
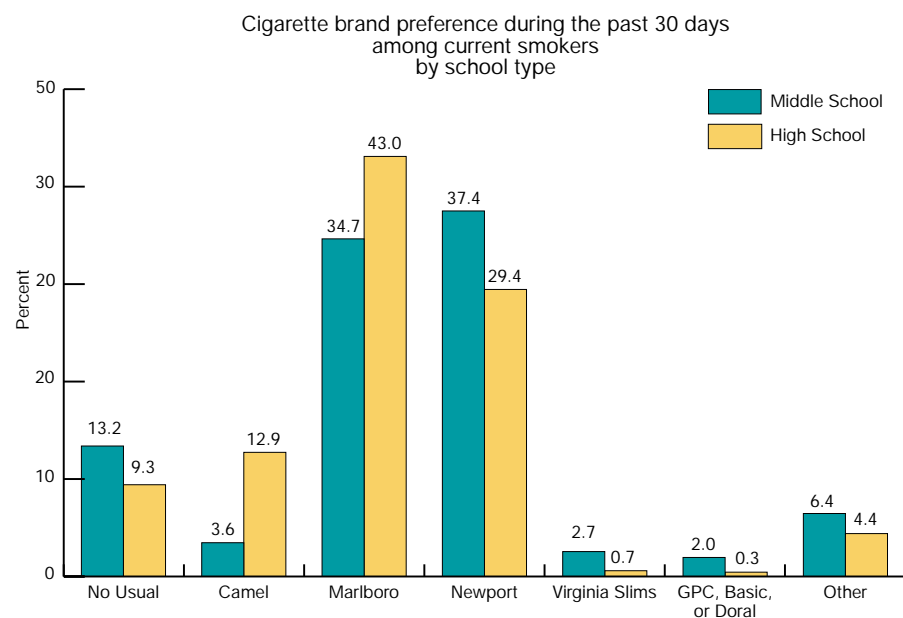
- 43,700 middle and high school students in Connecticut have ever smoked cigarettes daily
 - 5.4% or 7,700 middle school students and
 - 20.7% or 36,000 high school students
- 24,900 middle and high school students in Connecticut are currently frequent cigarette smokers
 - 2.5% or 3,500 middle school students and
 - 12.3% or 21,400 high school students
- High school students are about 4 times more likely than middle school students to have ever smoked cigarettes daily (20.7% and 5.4%), and about 5 times more likely to be frequent smokers (12.3% and 2.5%)
- Among middle school students, 1 in 4 current smokers smokes frequently; by high school, the proportion increases to 1 in 2
- Boys and girls are equally likely to have ever smoked daily and to be frequent cigarette smokers
- In high school, White students are significantly more likely than Black students to have ever smoked daily (22.6% and 11.5%) and to be frequent smokers (14.2% and 4.6%). Hispanic students do not differ significantly from either group. There are no significant race/ethnicity differences in cigarette use among middle school students



CIGARETTE PREFERENCES

Students who are current smokers (had smoked on at least 1 of the past 30 days) were asked about their cigarette preferences. They were asked what brand of cigarettes they usually smoked in the past 30 days (i.e., no usual brand; Camel; Marlboro; Newport; Virginia Slims; GPC, Basic or Doral; or some other brand). They were also asked whether they usually smoked menthol cigarettes.

- The top ranking cigarette brands among high school students are Marlboro (43.0%), Newport (29.4%) and Camel (12.9%)
- The top ranking cigarette brands among middle school students are Newport (37.4%) and Marlboro (34.7%)
- Among middle school students, boys are significantly more likely than girls to have “no usual brand” of cigarettes (22.0% and 3.9%). By high school, there are no significant gender differences in brand preference – *data not shown*
- In middle school, Whites are significantly more likely than Blacks to smoke Marlboro (41.9% and 12.9%), and Hispanics are significantly more likely than Whites to smoke Newport (59.1% and 27.5%) – *data not shown*
- In high school, Whites are significantly more likely than Blacks and Hispanics to smoke Camel (15.4%, 0.2% and 3.0%) and Marlboro (48.6%, 3.4%, and 26.1%), and Blacks are significantly more likely than Whites to smoke Newport (81.3% and 22.0%) – *data not shown*
- Almost 1 in 2 middle and high school current smokers smoke menthol cigarettes
- Black high school students are significantly more likely than Whites to smoke menthol cigarettes (69.3% and 42.6%)

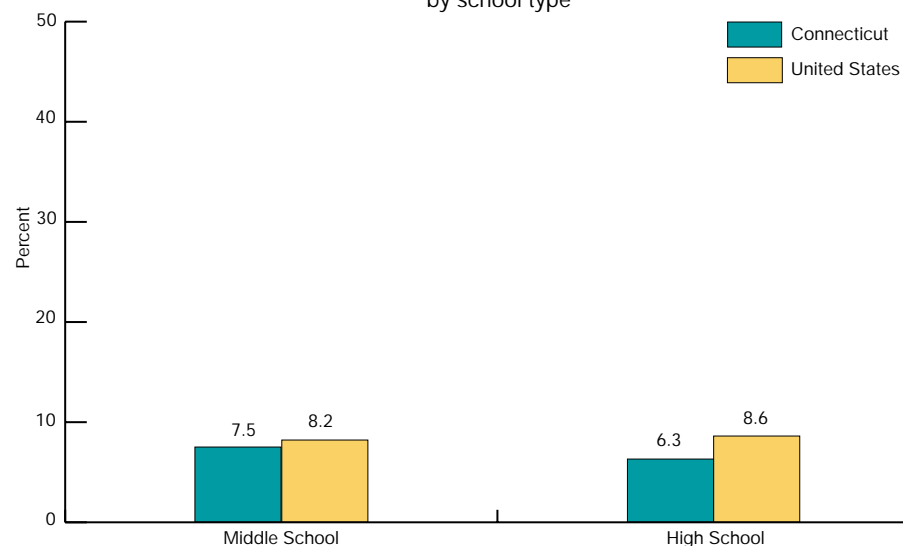


AGE FIRST SMOKED A WHOLE CIGARETTE

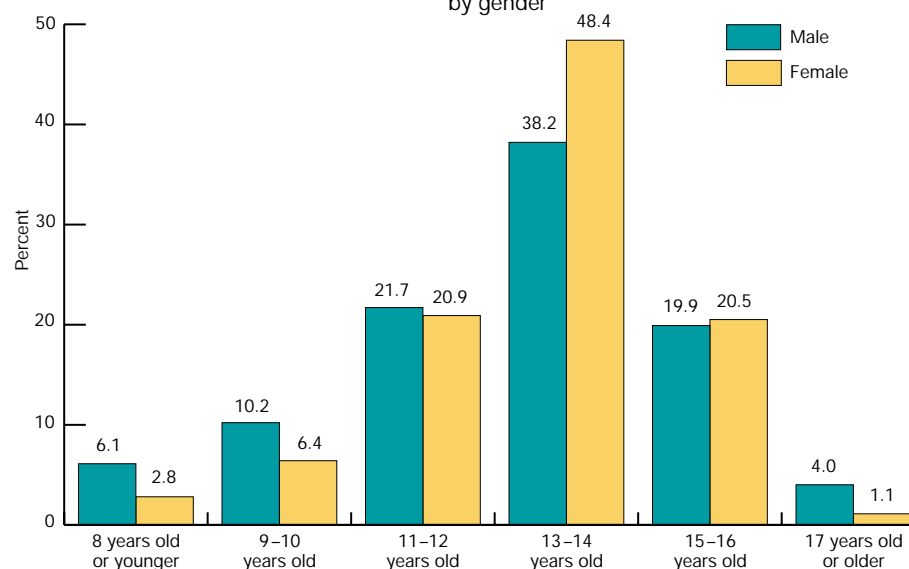
Students were asked how old they were when they smoked a whole cigarette for the first time. Two indicators of early use were assessed: the proportion of students who smoked a whole cigarette before age 11, and the age at which high school students who have ever smoked reported smoking their first whole cigarette.

- 21,600 middle and high school students in Connecticut smoked their first cigarette before age 11
 - 7.5% or 10,600 middle school students and
 - 6.3% or 11,000 high school students
- Connecticut initiation trends are similar to national trends
- 50% of high school students have ever smoked a whole cigarette – *data not shown*. Of these, at the time of initiation
 - 12.8% were under the age of 11
 - 21.3% were 11 to 12 years old
 - 43.4% were 13 to 14 years old
 - 20.0% were 15 to 16 years old
 - 2.6% were 17 years or older
- 4 in 5 high school students, who have ever smoked a whole cigarette, first smoked between the ages of 11 and 16 years old
- Boys are significantly more likely than girls to initiate smoking before age 11 (16.3% and 9.2%)
- There are no significant race/ethnicity differences in age of smoking first whole cigarette – *data not shown*
- *Healthy People 2010* initiation objectives are to reduce initiation of tobacco use among children and adolescents and to increase the average age of first use of tobacco products, but the measures are not directly comparable to the questions in this survey

CT and US students who first smoked a whole cigarette before 11 years of age by school type



Age high school smokers smoked their first whole cigarette by gender

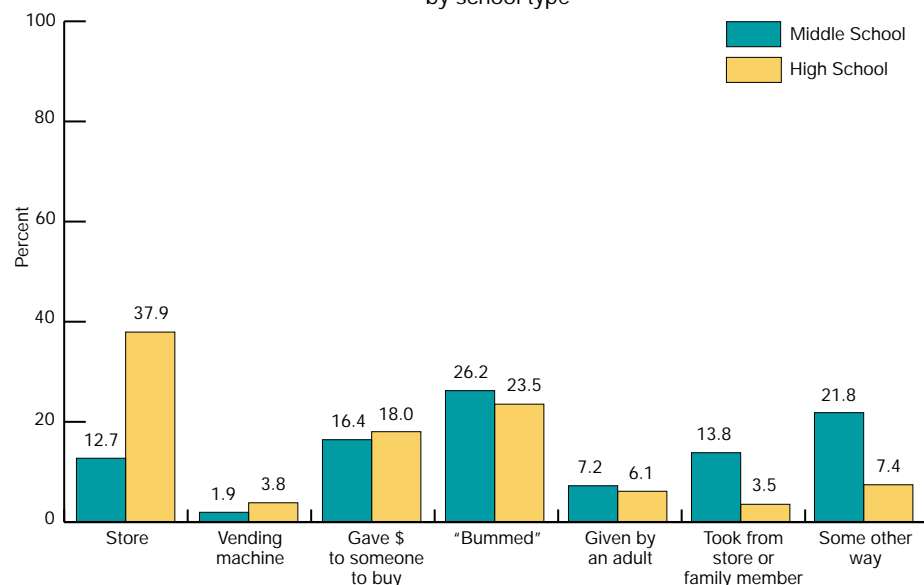


USUAL SOURCE & PLACE OF PURCHASE

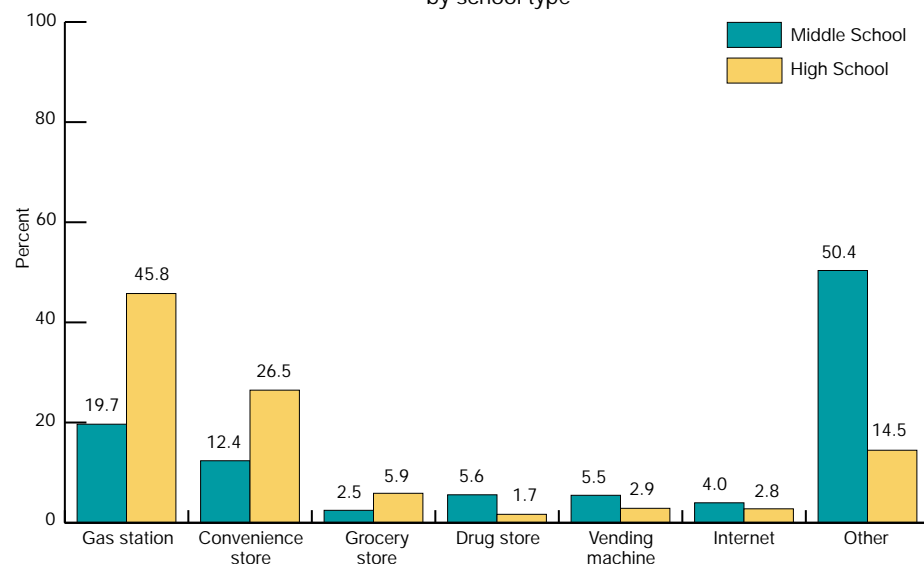
Students were asked how they usually obtained cigarettes during the past 30 days. Choices included: buying them from a store or vending machine, giving someone else money to buy them, borrowing or bumming them, receiving them from an adult (≥ 18 years old), taking them from a store or family member, or getting them some other way. Students were also asked where they bought their last pack cigarettes during the past 30 days (gas station, convenience store, grocery store, drugstore, vending machine, Internet, or other place). The results displayed here are for current smokers.

- Middle school smokers usually get their cigarettes by borrowing them (26.2%) or having someone else buy them (16.4%)
- High school smokers usually get their cigarettes by buying them at a store or vending machine (41.7%) or borrowing them (23.5%)
- Middle school students are significantly more likely than high school students to take cigarettes from stores or family members (13.8% and 3.5%) and to get them some other way (21.8% and 7.4%). The substantial proportion of students reporting getting their cigarettes some other way merits additional research
- Gas stations and convenience stores are the most common places to buy cigarettes for middle school (19.7% and 12.4%) and high school (45.8% and 26.5%) smokers
- 1 in 2 middle school current smokers (50.4%) reports buying his or her last pack of cigarettes at some other place. In high school, the proportion drops to 1 in 7 or 14.5%. This indicates the need for further investigation into where or how students purchase cigarettes

Usual source of cigarettes during the past 30 days among current smokers by school type



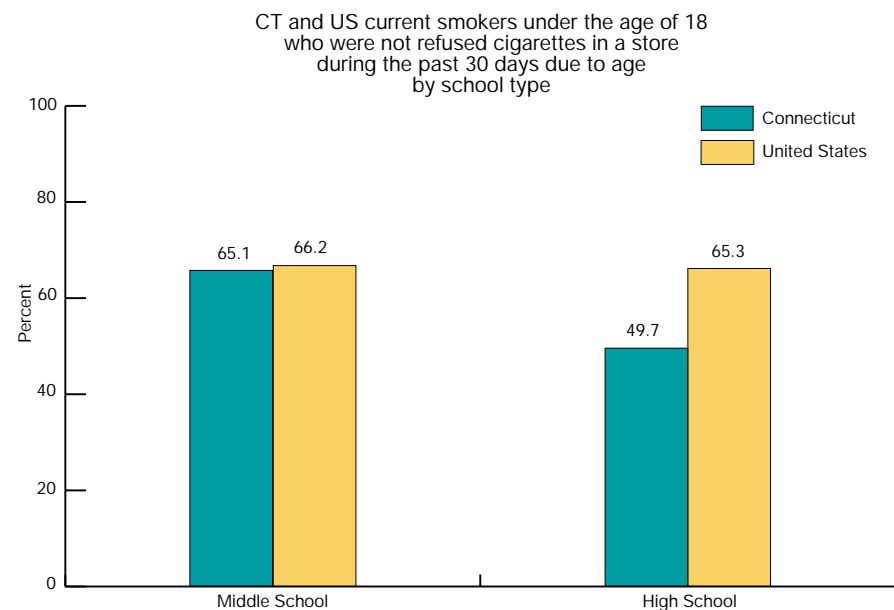
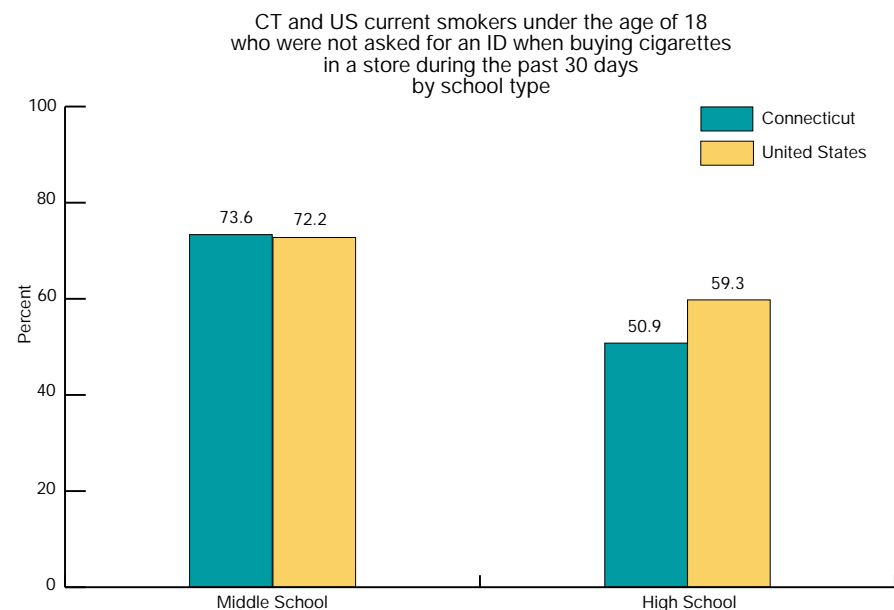
Place of purchase of the last pack of cigarettes during the past 30 days among current smokers by school type



ID REQUEST & SALE REFUSAL TO MINORS

It is illegal to sell tobacco to minors in the State of Connecticut. Students who tried to buy cigarettes in a store during the past 30 days were asked if they ever had to show proof of age. They were also asked if, during the past 30 days, anyone ever refused to sell them cigarettes because of their age. The results displayed here are for students who were less than 18 years old and who tried to buy cigarettes at a store during the past 30 days.

- 73.6% of middle school and 50.9% of high school current smokers in Connecticut were not asked to show proof of age when buying cigarettes during the past 30 days
- In both Connecticut and the United States, underage smokers in middle school are less likely than their high school counterparts to be asked to show proof of age
- Among middle and high school smokers, there are no gender or race/ethnicity differences in being asked to show proof of age – *data not shown*
- 2 in 3 underage current smokers in middle school were not refused sale of cigarettes during the past 30 days. In high school, 1 in 2 underage current smokers was not refused sale
- Connecticut underage high school current smokers are significantly less likely than their national counterparts to be able to buy cigarettes
 - 49.7% of CT and 65.3% of US high school current smokers were not refused sale
- This trend is similar for underage middle school current smokers in Connecticut and the US, but the difference is slight
 - 65.1% of CT and 66.2% of US middle school current smokers were not refused sale

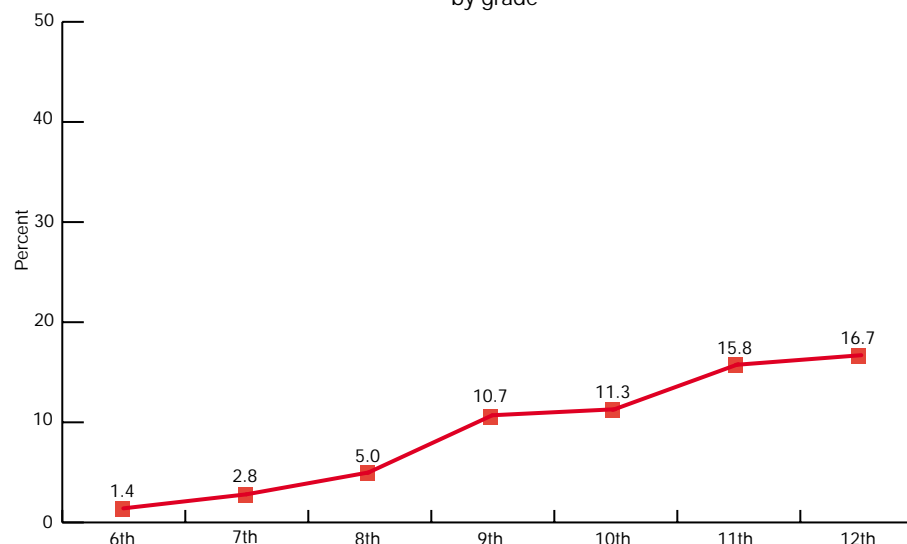


CIGARETTE SMOKING ON SCHOOL PROPERTY

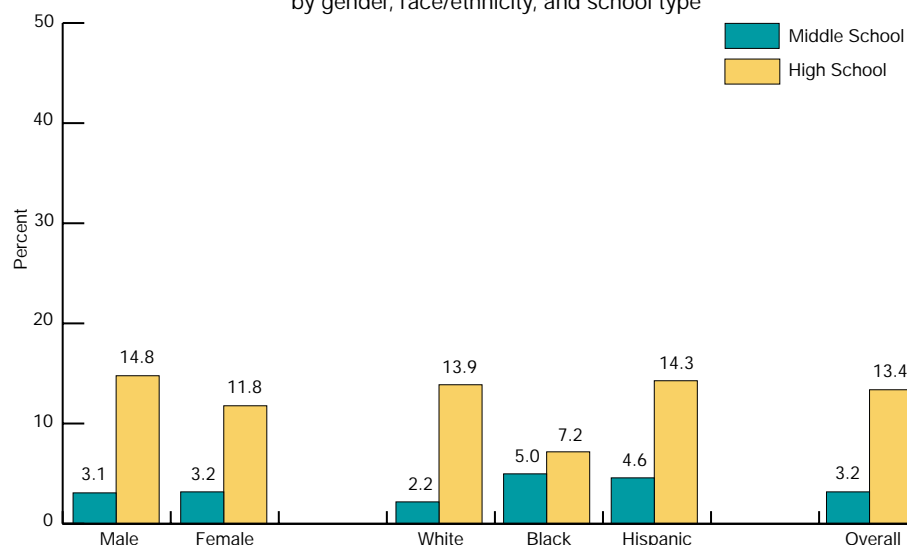
Schools constitute a major portion of an adolescent's environment. To assess the existence and enforcement of smoke-free policies in schools, students were asked on how many days during the past 30 days they smoked on school property. The results displayed here represent the responses of all students.

- 27,800 middle and high school students smoked on school property in the preceding 30 days
 - 3.2% or 4,500 middle school students and
 - 13.4% or 23,300 high school students
- High school students are 4 times more likely than middle school students to report smoking on school property in the past 30 days
- Although there appear to be slight gender and race/ethnicity differences in rates of smoking on school property, none of these is significant
- The percentage of students who smoked on school property in the past 30 days increases linearly by grade from 1.4% to 16.7%
- Connecticut students are more likely than students nationwide to smoke cigarettes on school property (3.2% and 2.4% for middle school, 13.4% and 9.3% for high school) – *national data not shown*
- A *Healthy People 2010* objective is to increase smoke-free and tobacco-free schools to 100%. While this survey does not evaluate the number of school with smoke-free or tobacco-free policies, in Connecticut, actual tobacco use by students on school property varies by grade between 1.4% and 16.7%

Students who smoked on school property in the past 30 days
by grade



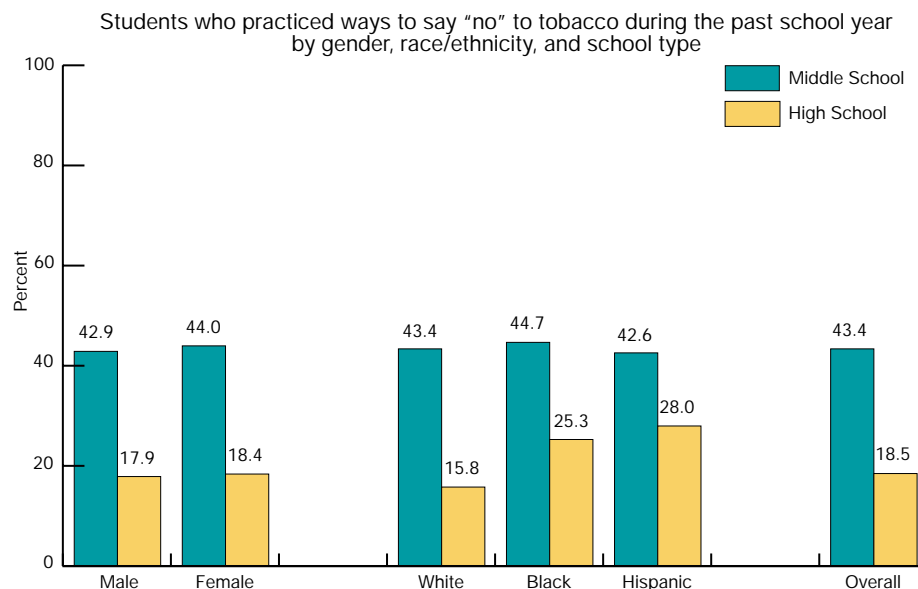
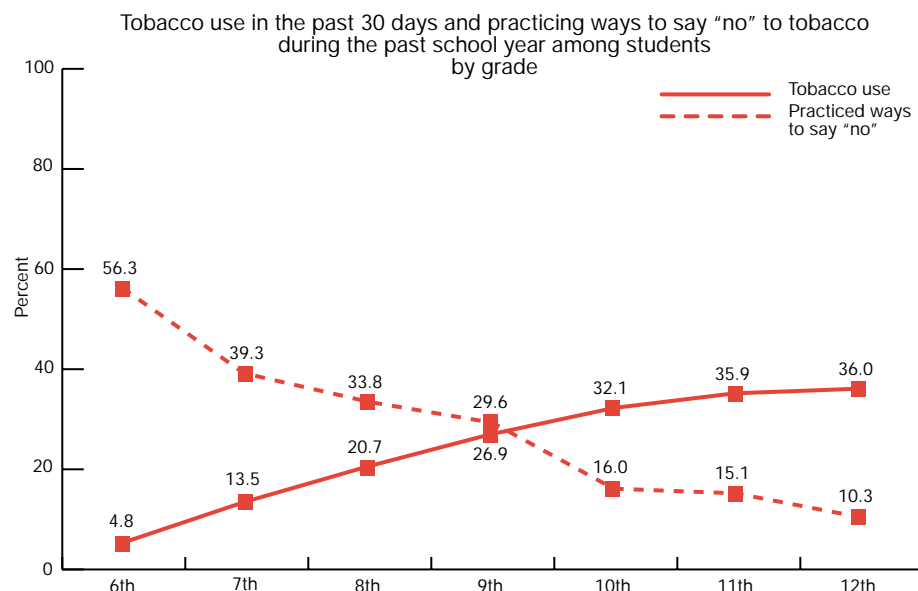
Students who smoked on school property in the past 30 days
by gender, race/ethnicity, and school type



PRACTICING TOBACCO REFUSAL SKILLS IN CLASS

One way schools can promote tobacco-free youth is to offer opportunities to practice refusal skills during class. School-based tobacco education programs should encourage never smokers to continue to abstain and should help promote cessation among current tobacco users. Students were asked if they had practiced ways to say “no” to tobacco in any of their classes during the past school year. The results displayed here are for all students.

- 93,800 middle and high school students in Connecticut practiced tobacco refusal skills in class during the past year
 - 43.4% or 61,600 middle school students and
 - 18.5% or 32,200 high school students
- As school grade increases, rates of practicing refusal drop from 56.3% in 6th grade to 10.3% in 12th grade. At the same time, tobacco use rates increase steadily from a low of 4.8% in 6th grade to a high of 36.0% in 12th grade
- Similarly, students who report participating in community activities to discourage tobacco use drops from 32.8% in 6th grade to 7.4% in 12th grade – *data not shown*
- 2 in 5 middle school students report practicing tobacco refusal skills in class during the past school year. In high school, the proportion is significantly lower, only 1 in 5
- In high school, Black and Hispanic students are more likely than White students to have practiced refusal skills in class during the past school year (25.3%, 28.0%, and 15.8% respectively). There are no significant race/ethnicity differences in middle school

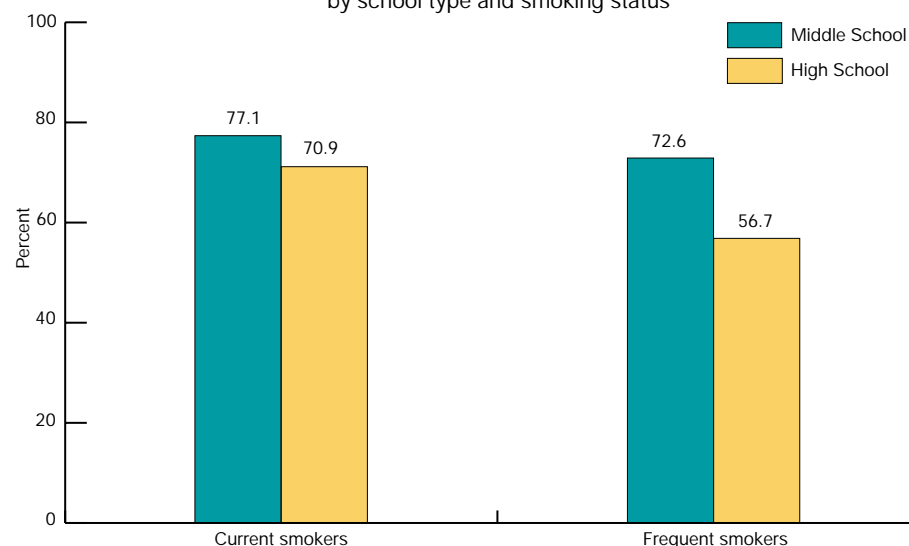


CESSATION BELIEFS

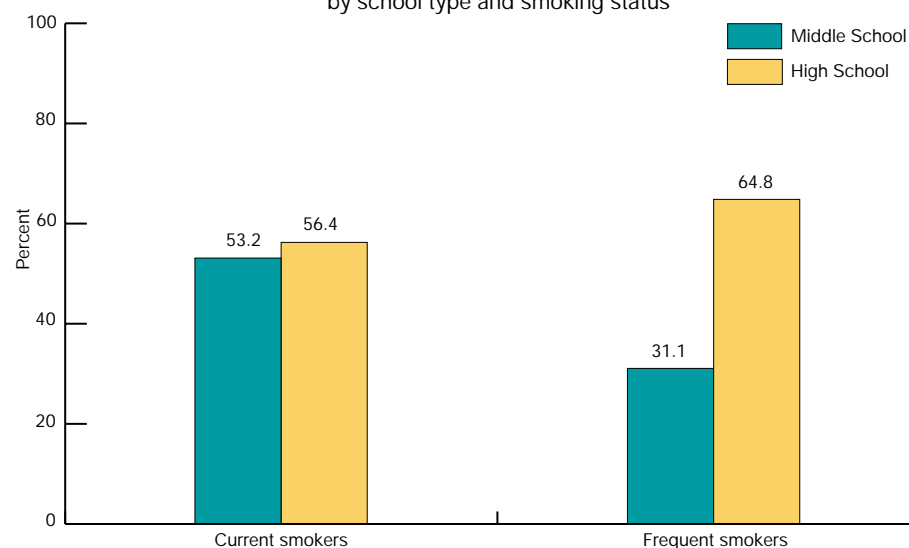
Students' beliefs in their ability to quit smoking and their desire to quit are important steps in the process of cessation. To begin to explore cessation attempts, students were asked if they thought they would be able to quit smoking cigarettes now if they wanted to, and if they want to quit smoking now. The results displayed here are for current and frequent smokers.

- In middle school, approximately 3 in 4 current and frequent smokers think they would be able to quit if they wanted to (77.1% and 72.6%)
- In high school, current smokers are significantly more likely than frequent smokers to think they would be able to quit if they wanted to (70.9% and 56.7%)
- Overall, middle school smokers are slightly more likely than high school smokers to think they can quit
- 32,500 middle and high school current smokers in Connecticut want to quit smoking
 - 53.2% or 7,400 middle school current smokers and
 - 56.4% or 25,100 high school current smokers
- Among frequent smokers, high school students are twice as likely as middle school students to want to quit (64.8% and 31.1%)

Students who think they can quit smoking cigarettes now if they wanted to by school type and smoking status



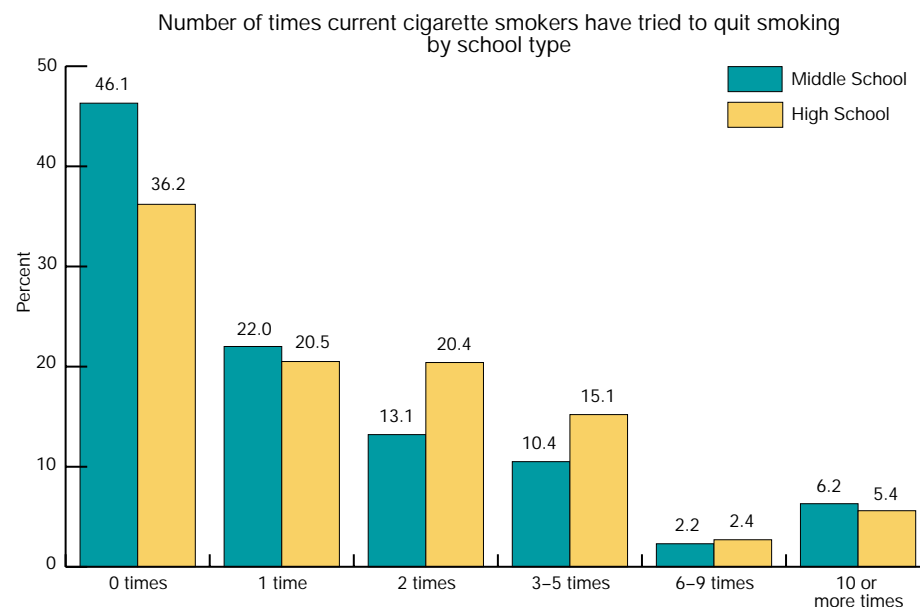
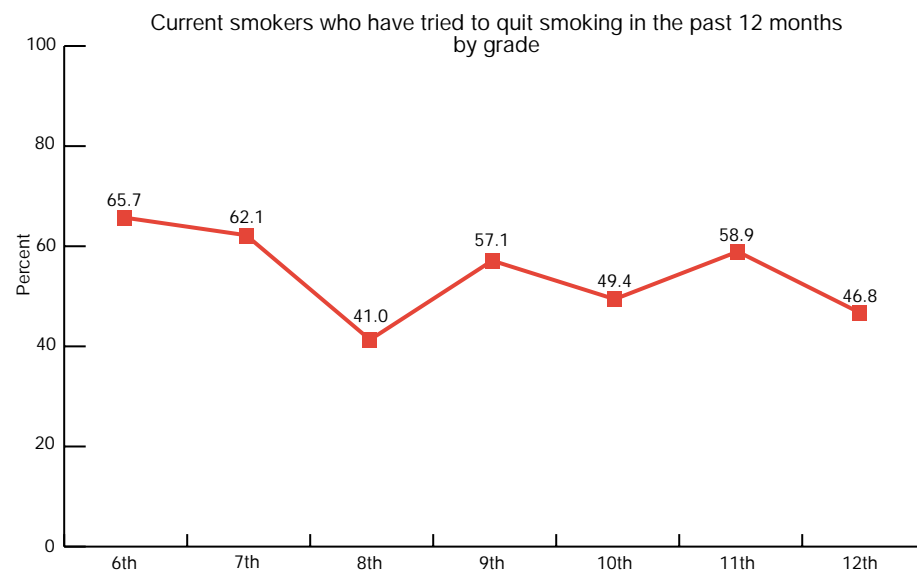
Students who want to quit smoking cigarettes by school type and smoking status



QUIT ATTEMPTS AMONG CURRENT SMOKERS

Students were asked two questions to assess their recent and lifetime efforts to quit smoking. The first question asked if they had tried to quit smoking during the past 12 months, and the second asked how many times they have ever tried to quit smoking. The results displayed here are for those students who are current smokers (those who smoked on at least 1 of the past 30 days).

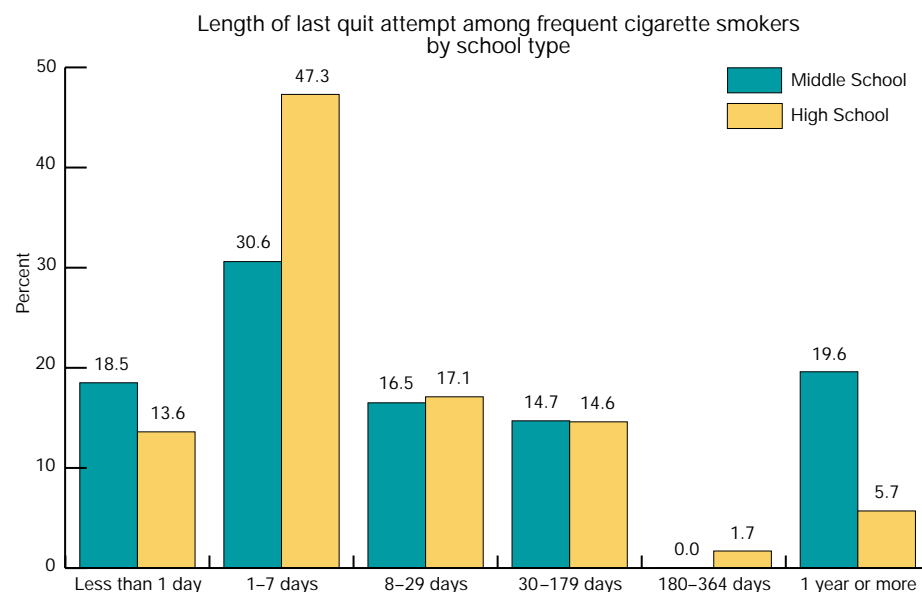
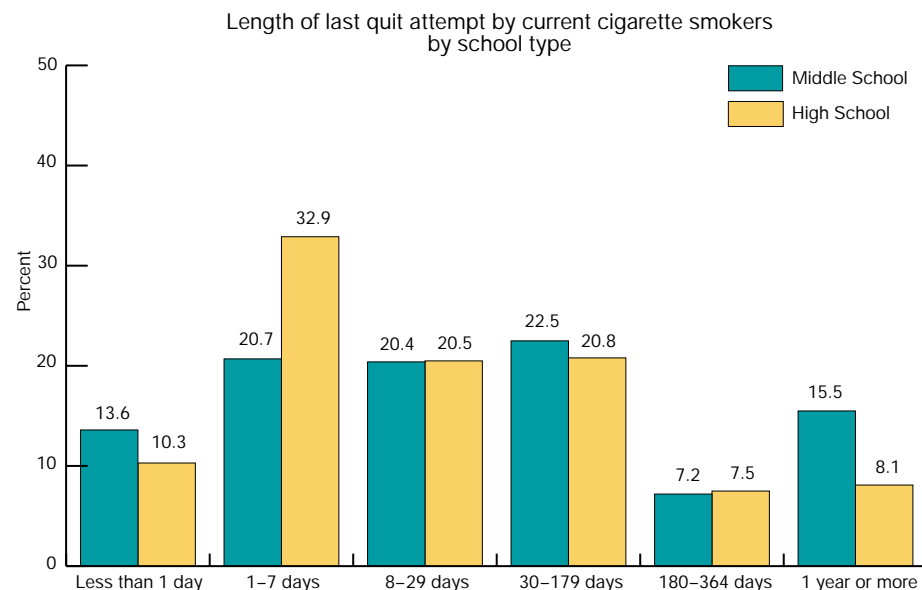
- 30,600 middle and high school current smokers in Connecticut have tried to quit smoking in the past 12 months – *data not shown*
 - 50.3% or 7,000 middle school current smokers and
 - 53.0% or 23,600 high school current smokers
- The percent of current smokers who have tried to quit during the past 12 months varies by grade between 41.0% and 65.7%
- 53.9% of middle school current smokers have tried to quit smoking at least once during their lives
 - 22.0% have tried to quit once
 - 13.1% have tried to quit twice
 - 10.4% have tried to quit 3-5 times, and
 - 8.4% have tried to quit 6 or more times
- 63.8% of high school current smokers have tried to quit smoking at least once during their lives
 - 20.5% have tried to quit once
 - 20.4% have tried to quit twice
 - 15.1% have tried to quit 3-5 times, and
 - 7.8% have tried to quit 6 or more times
- The *Healthy People 2010* objective for cessation is to increase cessation attempts among high school students to 84%. In Connecticut, the percent of high school students who have ever tried to quit smoking varies by grade between 48.4% and 66.1% – *data not shown*



LENGTH OF LAST QUIT ATTEMPT

The number of times a student tries to quit smoking is only part of the smoking cessation picture. While some students quit and never smoke again, others may only quit temporarily. Students were asked how long they stayed off cigarettes the last time they tried to quit. The results displayed here are for current and frequent cigarette smokers who have ever tried to quit smoking.

- 34,200 middle and high school current smokers in Connecticut have tried, unsuccessfully, to quit – *data not shown*
 - 55.0% or 7,650 middle school current smokers and
 - 59.7% or 26,600 high school current smokers
- 1 in 2 middle school and 2 in 3 high school current smokers (54.7% and 63.7%) were unable to stay off cigarettes for at least 30 days during their last quit attempt
- 2 in 3 middle school and 3 in 4 high school frequent smokers (65.6% and 78.0%) were unable to stay off cigarettes for at least 30 days during their last quit attempt
- High school current smokers are significantly more likely than middle school current smokers to resume smoking between 1 and 7 days after quitting (32.9% and 20.7%)
- Staying smoke-free for over six months does not ensure absolute cessation, since 22.7% of middle school and 15.6% of high school current smokers were able to quit for 6 months or more during their last attempt

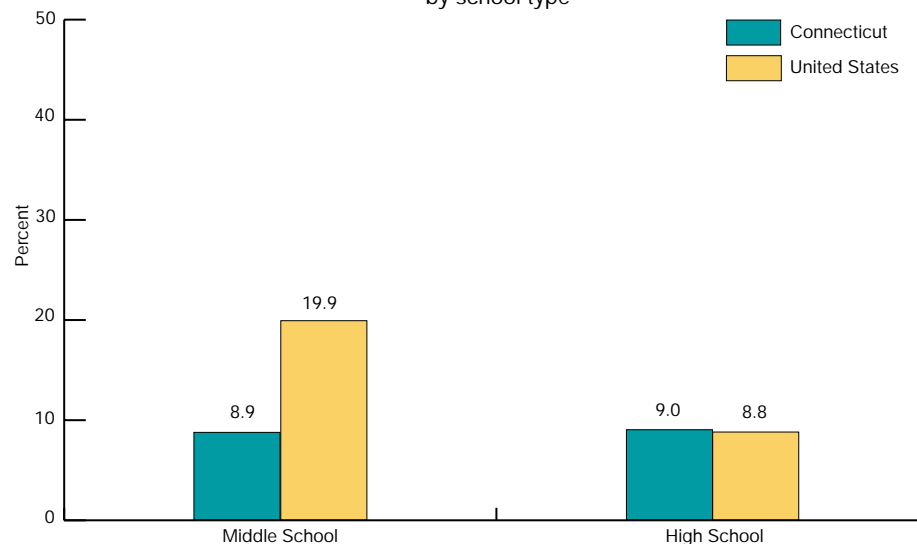


PARTICIPATION IN CESSATION PROGRAMS

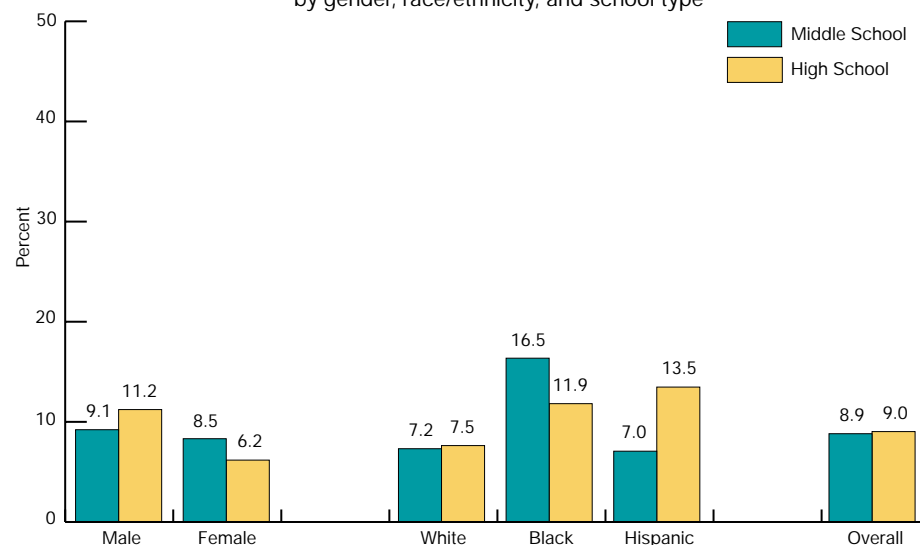
To assess whether students access any programs to assist them in becoming tobacco-free, students were asked if they had ever participated in a program to help them quit using tobacco (in any form). Since the question addressed any form of tobacco use, the results displayed here are for students who report having ever used any form of tobacco.

- In Connecticut, fewer than 1 in 10 middle and high school students who have ever used tobacco have participated in a program to help them quit using tobacco
- In middle school, Connecticut ever tobacco users are significantly less likely than their national counterparts to have participated in a program to help them quit (8.9% and 19.9%)
- In high school, 9.0% of Connecticut ever tobacco users have participated in a program to help them quit compared to 8.8% nationally
- The percentage of ever tobacco users who have participated in a tobacco cessation program varies by grade between 8.0% and 10.9% – *data not shown*
- There are no significant differences in cessation program participation by gender or race/ethnicity in middle or high school students

CT and US ever tobacco users who have participated in a program to help them quit using tobacco by school type



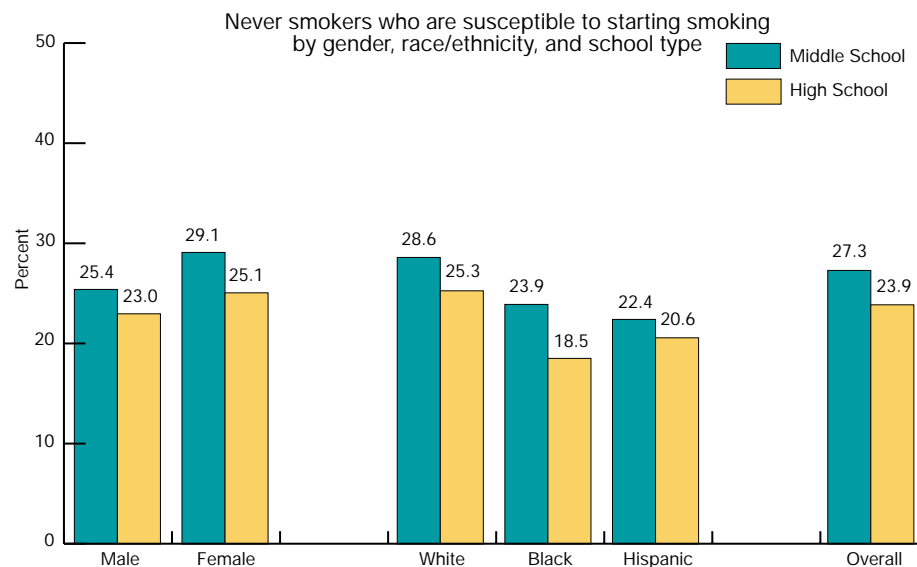
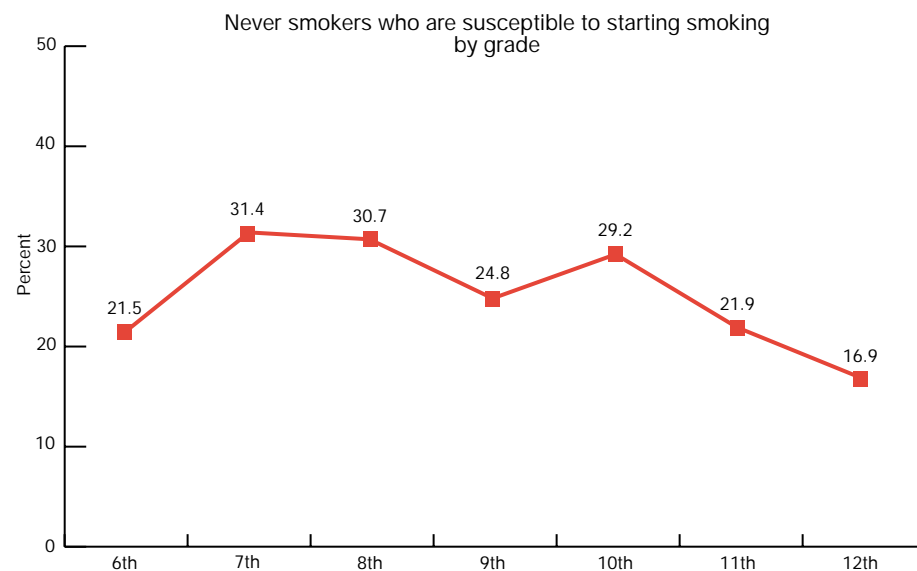
Ever tobacco users who have ever participated in a program to help them quit using tobacco by gender, race/ethnicity, and school type



STUDENTS SUSCEPTIBLE TO SMOKING

A combination of measures was used to assess susceptibility to cigarette smoking among students who have not yet smoked. Students who think that they may try cigarette smoking soon or in the next year and who would smoke a cigarette offered by a best friend are susceptible to starting smoking. These students lack a firm resolve to abstain from cigarette smoking and are more susceptible to peer pressure. The results displayed here are for never smokers.

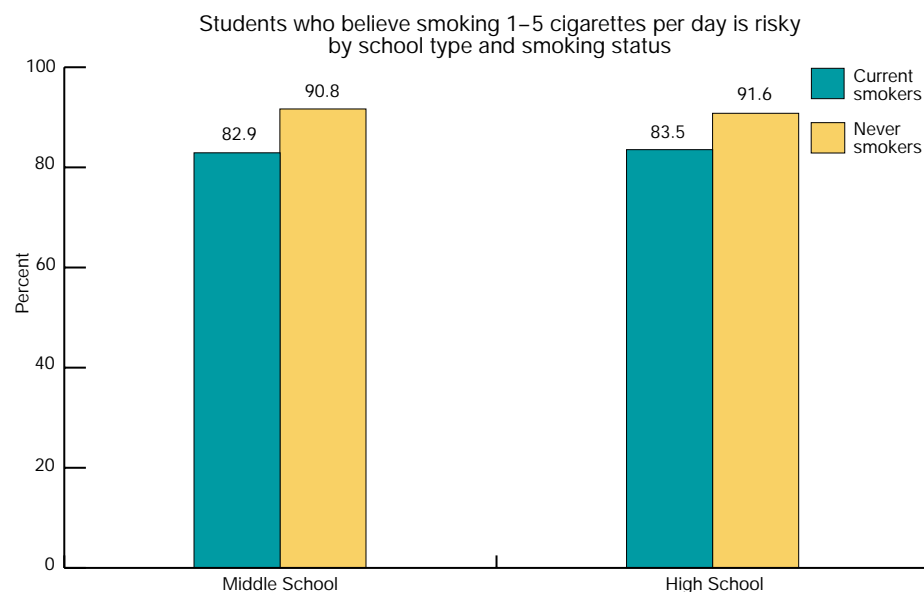
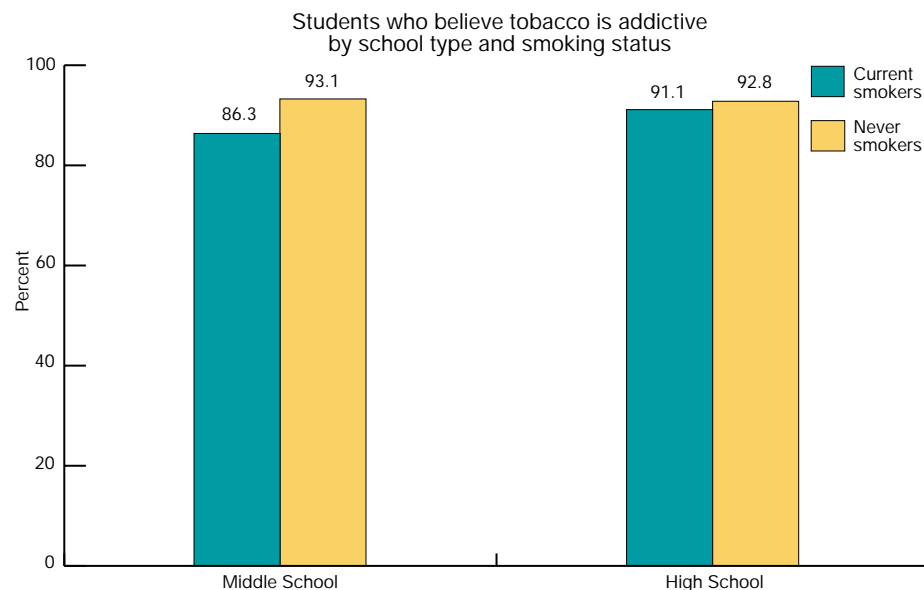
- 41,800 middle and high school students in Connecticut are susceptible to starting smoking
 - 27.3% or 26,400 middle school students and
 - 23.9% or 15,400 high school students
- The percent of students who are susceptible to cigarette smoking varies by grade between 16.9% and 31.4%
- Susceptibility to smoking is highest between grades 7 and 10
- Approximately 1 in 4 boys in middle and high school are susceptible to starting smoking. Among girls, almost 1 in 3 middle school and 1 in 4 high school girls are susceptible to starting smoking
- There are no significant race/ethnicity differences in smoking susceptibility rates among middle or high school students
- 1 in 5 middle school never smokers and almost 1 in 5 high school never smokers believe they will try smoking during the next year – *data not shown*
- 1 in 6 middle school never smokers and 1 in 7 high school never smokers would accept a cigarette from a friend – *data not shown*



HEALTH BELIEFS ABOUT TOBACCO USE

Students were asked several questions to assess their perceptions of the risks associated with tobacco use. Students rated their agreement with the following statements: “people can become addicted to tobacco just like cocaine or heroin,” and “young people who smoke 1-5 cigarettes a day risk harming themselves.” The results displayed here are for current and never smokers who responded definitely or probably yes.

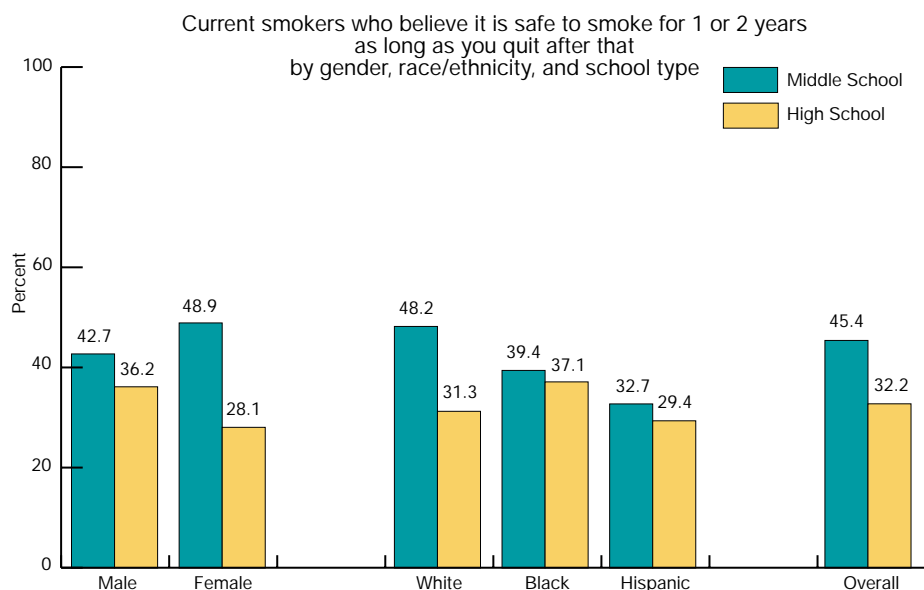
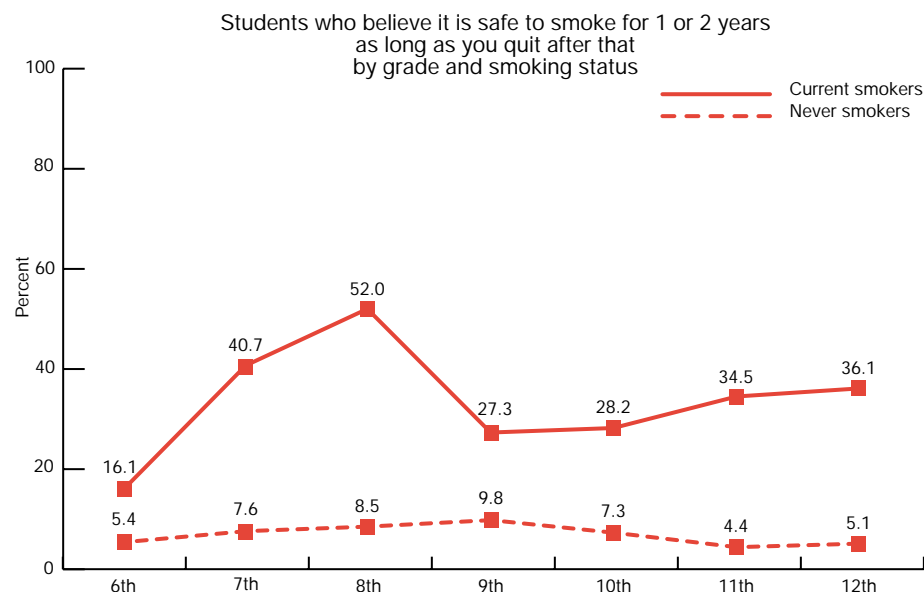
- 9 in 10 middle and high school students, regardless of smoking status, believe that people can become addicted to tobacco just like heroin or cocaine
- Among middle school current smokers, girls are significantly more likely than boys to believe that tobacco is addictive (97.2% and 77.7%) – *data not shown*
- White middle school never smokers are significantly more likely than Black and Hispanic middle school never smokers to believe that tobacco is addictive (96.0%, 80.8%, and 86.7% respectively) – *data not shown*
- 9 in 10 never smokers and 8 in 10 current smokers believe that young people who smoke 1-5 cigarettes a day risk harming themselves
- High school current smokers are significantly more likely to believe that tobacco is addictive (91.1%) than to believe that they are harming themselves by smoking 1-5 cigarettes per day (83.5%)



SHORT TERM SMOKING HEALTH BELIEFS

To assess students' perceived health risks of smoking on a short term basis, students were asked to rate their agreement with the following statement: "it is safe for a person to smoke for only a year or two as long as they quit after that." The results displayed here are for never smokers and current smokers who responded definitely or probably yes.

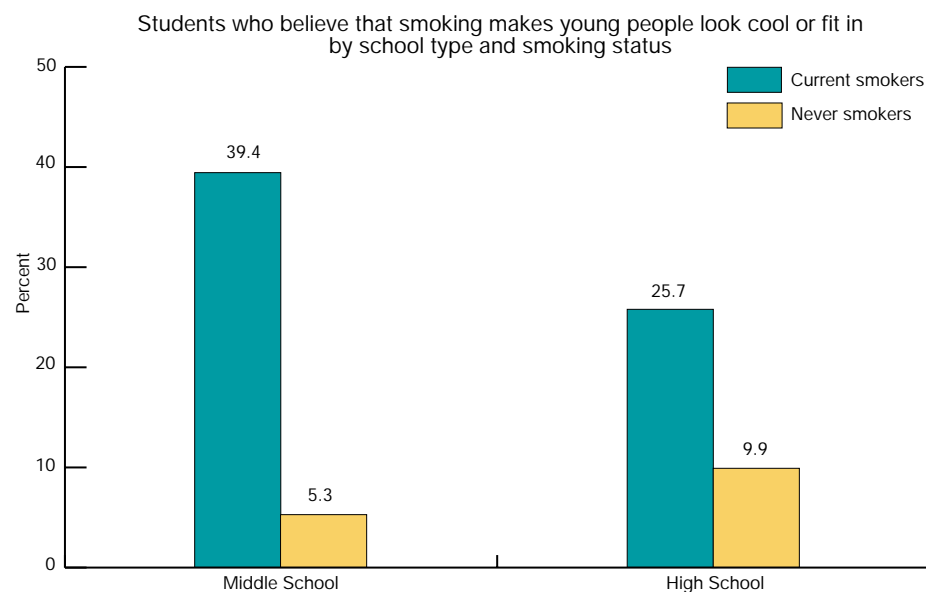
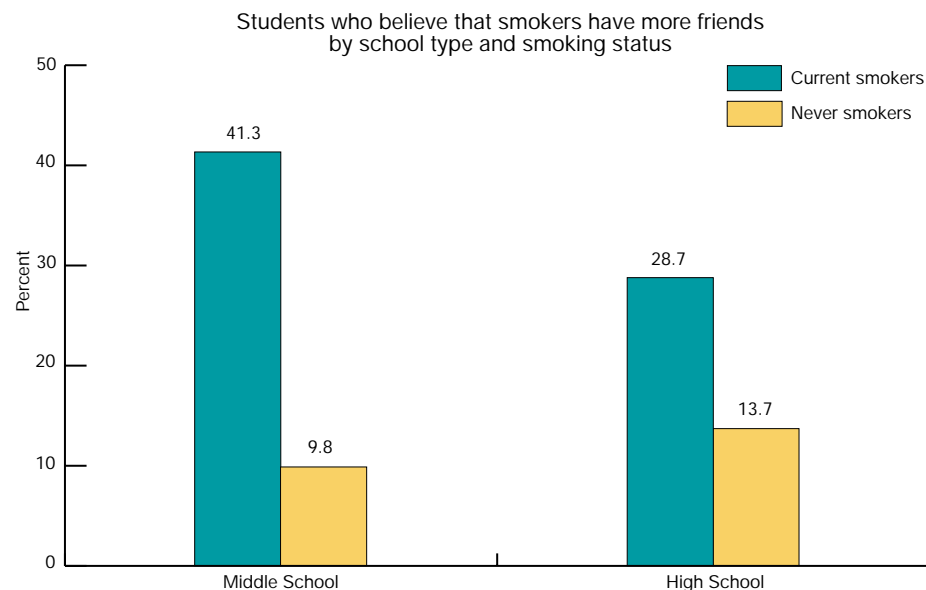
- In every grade, current smokers are significantly more likely than never smokers to believe that smoking for one or two years (short term) is safe
- Almost 1 in 2 middle school and approximately 1 in 3 high school current smokers believe that short term smoking is safe
- In middle school, current smokers are 6.5 times more likely than never smokers to believe that short term smoking is safe (45.4% and 7.0%); in high school, current smokers are 4.5 times more likely than never smokers to believe that it is safe (32.2% and 7.1%) – *never smoker data not shown*
- Among girls, middle school current smokers are significantly more likely than their high school counterparts to believe that short term smoking is safe (48.9% and 28.1%)
- White middle school current smokers are significantly more likely than their high school counterparts to believe that short term smoking is safe (48.2% and 31.3%)



SOCIAL BELIEFS ABOUT SMOKING

To assess students' perceived social benefits or deficits of smoking, students were asked to rate their agreement with the following statements: "people who smoke have more friends," and "smoking cigarettes makes young people look cool or fit in." The results displayed here are for never smokers and current smokers who responded definitely or probably yes.

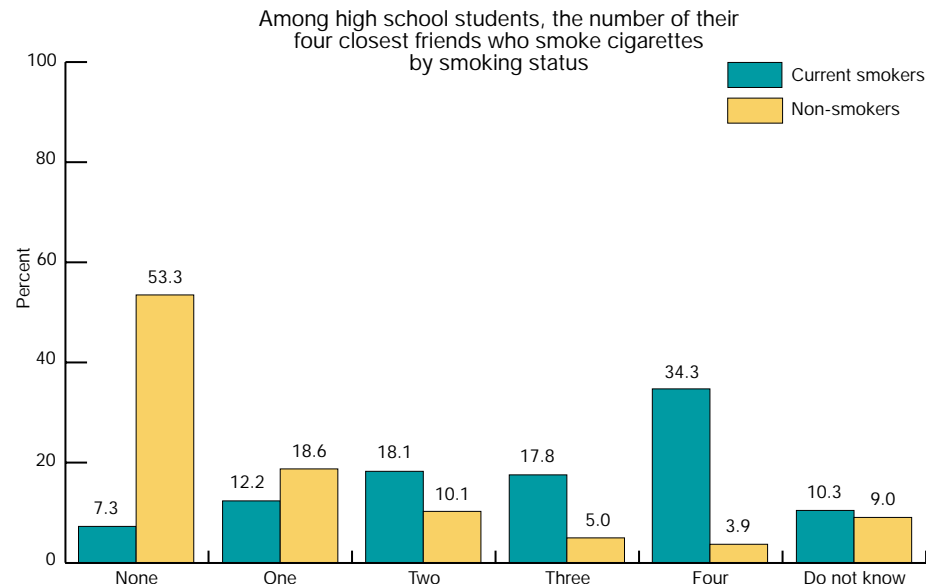
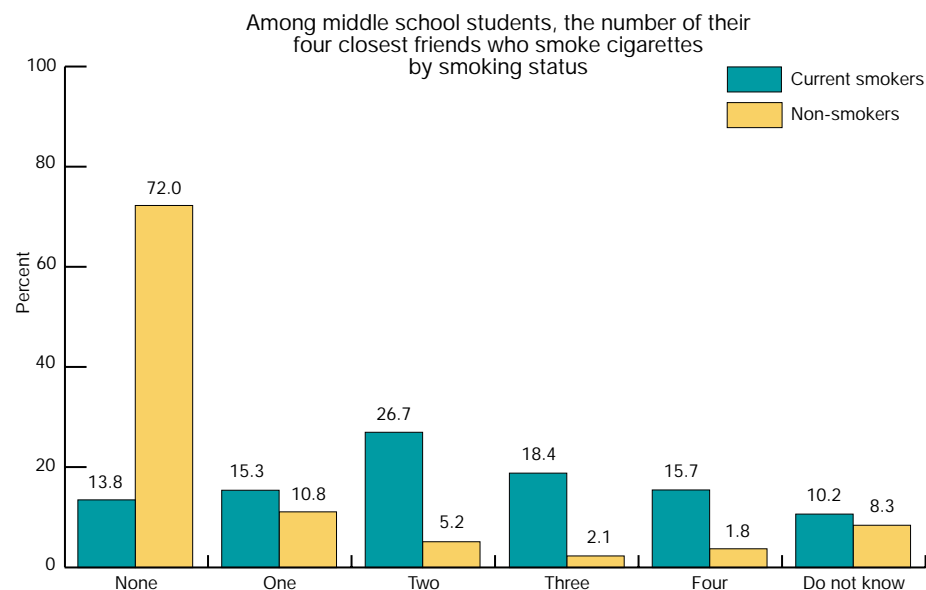
- In middle school, current smokers are 4 times more likely than never smokers to believe that people who smoke have more friends (41.3% and 9.8%). By high school, current smokers are only 2 times more likely than never smokers to believe that smokers have more friends (28.7% and 13.7%). Both differences are significant
- Black and Hispanic current and never smokers in both middle and high school are more likely than Whites to believe that people who smoke have more friends – *data not shown*
- The belief that smoking makes young people look cool or fit in differs significantly between current and never smokers. In middle school, current smokers are 7.4 times more likely than never smokers to believe it (39.4% and 5.3%). By high school, current smokers are just 2.6 times more likely than never smokers to believe it (25.7% and 9.9%)
- Positive social perceptions of smoking decrease among current smokers between middle and high school. However, positive social perceptions of smoking increase among never smokers during this same period
- In high school, Black never smokers are twice as likely as White never smokers to believe that smoking makes young people look cool or fit in (16.9% and 8.1%) – *data not shown*



SMOKING AMONG PEER GROUPS

Other research has shown that smoking occurs within peer groups; smokers tend to associate with other smokers, and non-smokers tend to associate with other non-smokers. To assess smoking practices within peer groups, students were asked to state how many of their four closest friends smoke cigarettes. Results displayed here are for current smokers and non-smokers.

- 9.1% of middle school non-smokers report that two or more of their four closest friends smoke cigarettes, compared to 60.8% of current smokers
- 19.0% of high school non-smokers report that two or more of their four closest friends smoke cigarettes, compared to 70.2% of current smokers
- More than 1 in 3 middle school current smokers and more than 1 in 2 high school current smokers report that three or more of their four closest friends smoke cigarettes
- In both middle and high school, current smokers were 9 times more likely than non-smokers to report that all of their four closest friends smoke cigarettes (15.7% and 1.8%, 34.3% and 3.9%, respectively)
- Almost 3 in 4 non-smokers in middle school report that none of their four best friends smokes cigarettes; by high school, this drops to approximately 1 in 2
- There are no race/ethnicity differences among peer groups in non-smoking middle school students. However, by high school, White non-smoking students were 5 times more likely than Blacks and 11 times more likely than Hispanics to report that none of their four closest friends smokes cigarettes (39.7%, 7.6%, and 3.7%, respectively) – *data not shown*

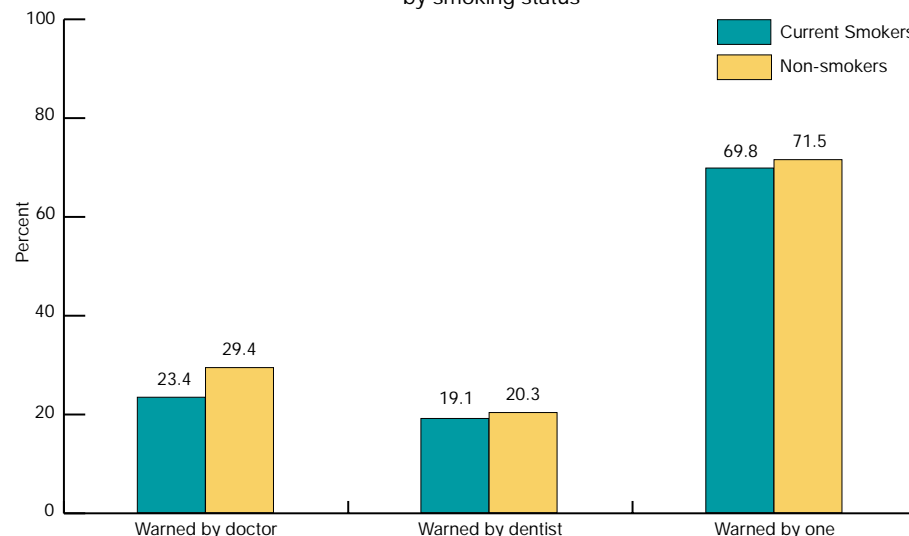


ADULT COUNSEL ON TOBACCO USE

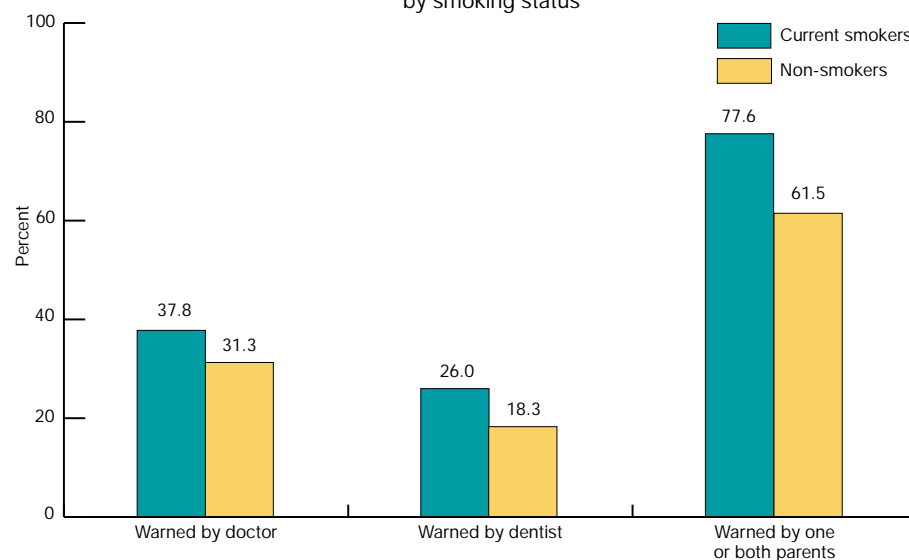
To assess adult counsel on the dangers of tobacco use, students were asked if they ever received warnings from parents or guardians, and if a doctor or dentist (or their staff) had warned them within the past 12 months. The results displayed here are for current smokers and non-smokers and, in the cases of provider intervention, students who have been to a doctor or dentist's office in the past 12 months.

- 7 in 10 middle school current and non-smokers have ever been warned about the dangers of tobacco use by one or both parents
- 6 in 10 high school non-smokers and almost 8 in 10 current smokers have ever been warned about the dangers of tobacco use by one or both parents
- In middle school, 23.4% of current smokers and 29.4% of non-smokers have been warned at a doctor's office within the past year about the dangers of tobacco use. Approximately 20% have been warned at a dental office
- In high school, 37.8% of current smokers and 31.3% of non-smokers have been warned at a doctor's office about the dangers of tobacco use within the past year. Only 26.0% of current and 18.3% of non-smokers have been warned at a dental office
- 3 in 4 middle school and 3 in 5 high school current smokers who have been to a doctor within the past year received no warning about the dangers of tobacco use
- 4 in 5 middle school and 3 in 4 high school current smokers who have been to a dentist within the past year received no warning about the dangers of tobacco use

Middle school students who were warned by their doctor, dentist, or parent(s) about the dangers of smoking by smoking status



High school students who were warned by their doctor, dentist, or parent(s) about the dangers of smoking by smoking status

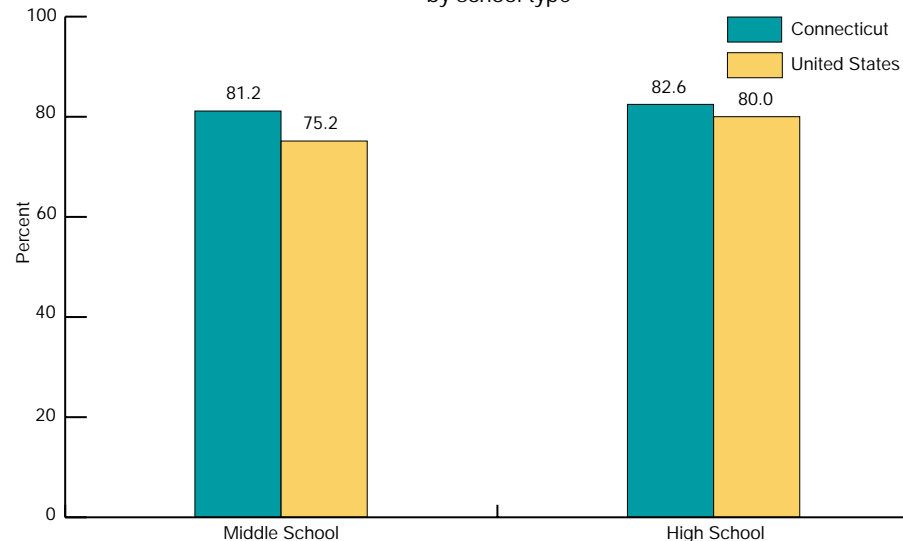


TOBACCO INFLUENCES IN THE MEDIA

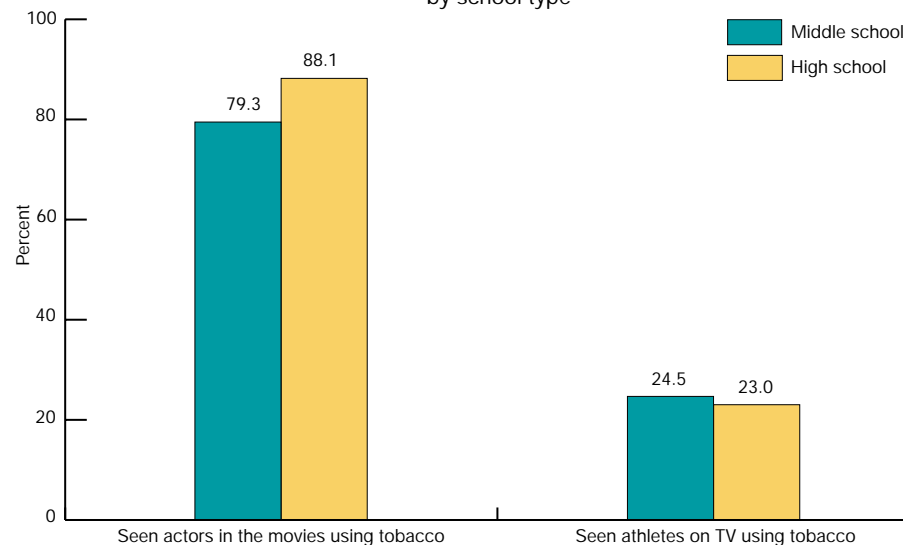
Students were asked questions to assess their exposure to tobacco messages in the media. Students were asked if they had seen or heard anti-tobacco advertisements in the past 30 days. They were also asked if they normally see athletes using tobacco on television, or actors using tobacco on television or in movies. The results displayed here are for those students who reported listening to the radio, watching television, and/or going to the movies.

- Slightly more than 8 in 10 Connecticut middle and high school students saw or heard anti-tobacco ads on radio, television, or the Internet in the past 30 days
- Connecticut middle school students are significantly more likely than their national counterparts to report seeing or hearing anti-tobacco ads in the past 30 days (81.2% and 75.2%)
- High school students in Connecticut and nationally have similar rates of exposure to anti-tobacco advertising (82.6% and 80.0%)
- Nearly 9 in 10 high school students and 8 in 10 middle school students in Connecticut report seeing actors using tobacco
- 1 in 4 middle and high school students in Connecticut have seen athletes using tobacco on television
- Among current smokers, boys are significantly more likely than girls to see athletes using tobacco on television (45.4% and 25.4% in middle, and 33.1% and 19.7% in high school) –*data not shown*
- A *Healthy People 2010* objective is to eliminate tobacco advertising and promotions that influence minors and young adults

CT and US students who saw or heard anti-tobacco advertisements in the past 30 days by school type



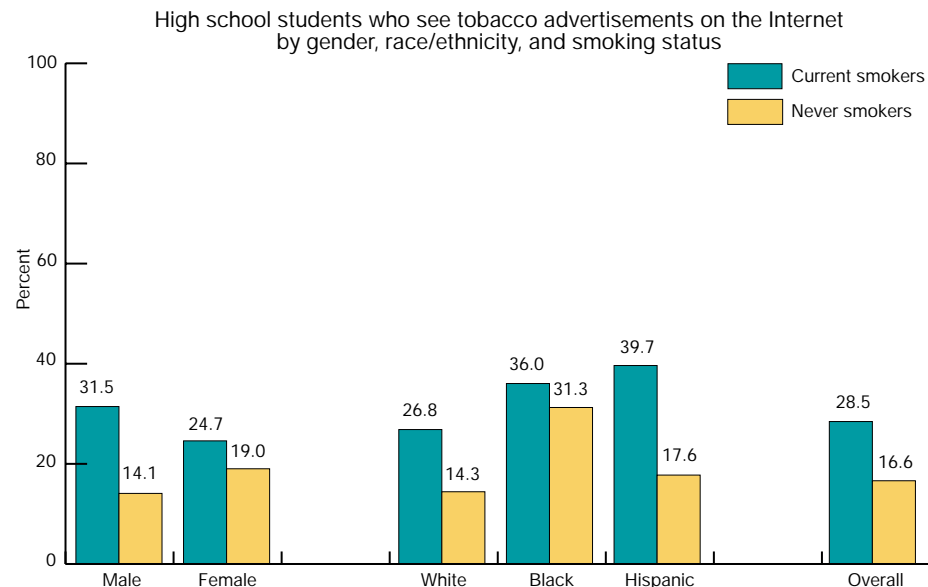
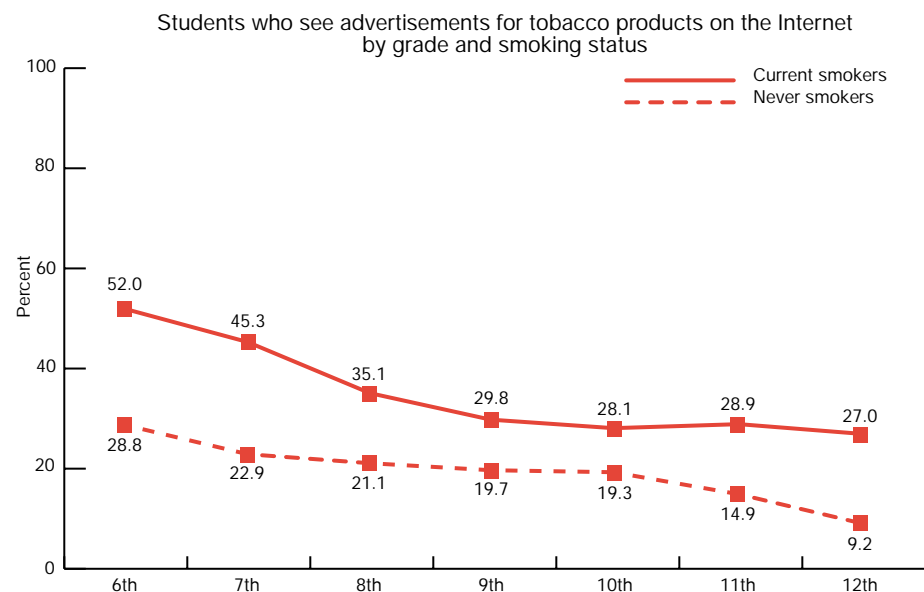
Students who have seen actors or athletes use tobacco on TV or in the movies by school type



TOBACCO ADS ON THE INTERNET

Tobacco advertising on the Internet is currently unregulated. To assess their exposure to advertising through this medium, students were asked how often they see ads for tobacco products when they use the Internet. The results displayed here are for current and never smokers who use the Internet and report seeing ads some or most of the time.

- By grade, current smokers are consistently more likely than never smokers to see ads on the Internet for tobacco products; however, these differences are not always significant
- By school type, current smokers are significantly more likely than never smokers to report seeing ads for tobacco products on the Internet, 40.5% and 24.6% in middle school and 28.5% and 16.6% in high school – *middle school data not shown*
- White current smokers in high school are almost twice as likely as never smokers to see tobacco ads on the Internet (26.8% and 14.3%). For Black and Hispanic current and never smokers, the differences are not significant
- Among high school boys, current smokers are more than twice as likely as never smokers to see Internet ads for tobacco products (31.5% and 14.1%). For high school girls, this difference is not significant (24.7% and 19.0%, respectively)
- Overall, 27.4% of all middle school and 20.0% of all high school students report seeing ads for tobacco products on the Internet some or most of the time – *data not shown*

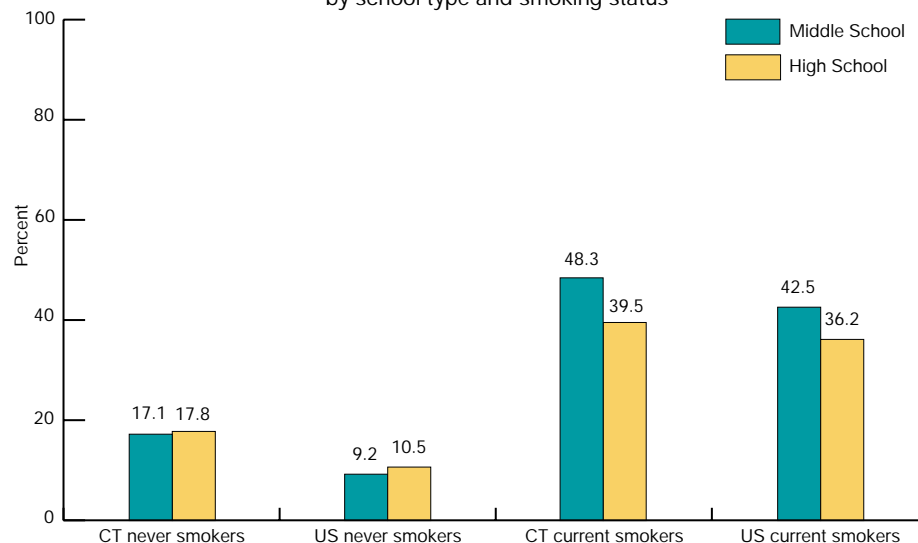


TOBACCO ADVERTISING RECEPTIVITY

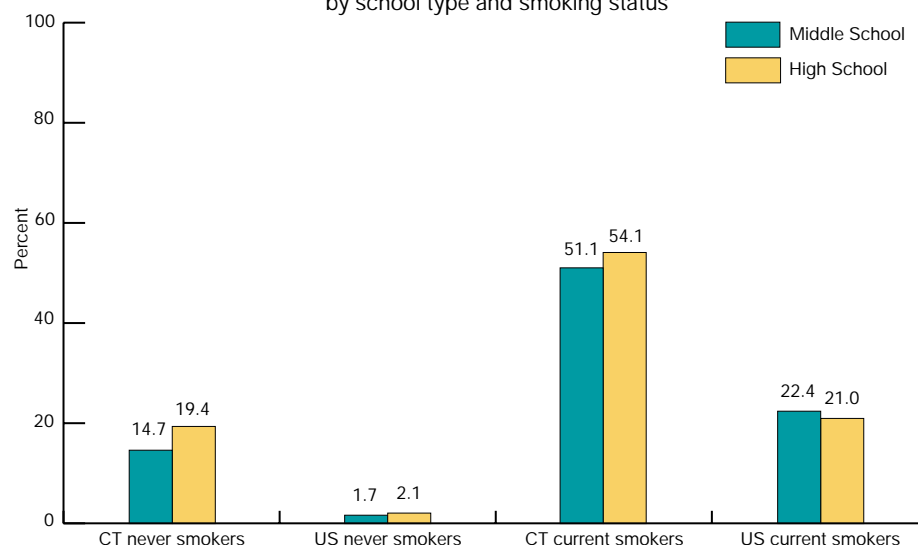
Two measures were used to assess tobacco advertising receptivity among students. Students were asked: if, during the past 12 months, they had bought or received anything with a tobacco company name or picture on it; and, if they would definitely or probably wear or use a product with a tobacco name or picture on it. The results displayed here are for current and never smokers.

- Connecticut middle and high school never smokers are over 1.7 times more likely than students nationally to have bought or received a product with a tobacco company name or picture on it in the past 12 months
 - 17.1% CT and 9.2% US for middle school and
 - 17.8% CT and 10.5% US for high school
- Connecticut middle and high school current smokers are equally likely as students nationally to have bought or received a product with a tobacco company name or picture on it in the past 12 months
 - 48.3% CT and 42.5% US for middle school and
 - 39.5% CT and 36.2% US for high school
- Connecticut never smokers are 9 times more likely than never smokers nationally to say they would wear or use a product with a tobacco company name or picture on it
 - 14.7% CT and 1.7% US in middle school and
 - 19.4% CT and 2.1% US in high school
- Connecticut current smokers are about 2.5 times more likely than national current smokers to say they would wear or use a product with a tobacco company name or picture on it
 - 51.1% CT and 22.4% US in middle school and
 - 54.1% CT and 21.0% US in high school

CT and US students who bought or received anything with a tobacco company name or picture on it in the past 12 months by school type and smoking status



CT and US students who would ever wear or use anything with a tobacco company name or picture on it by school type and smoking status

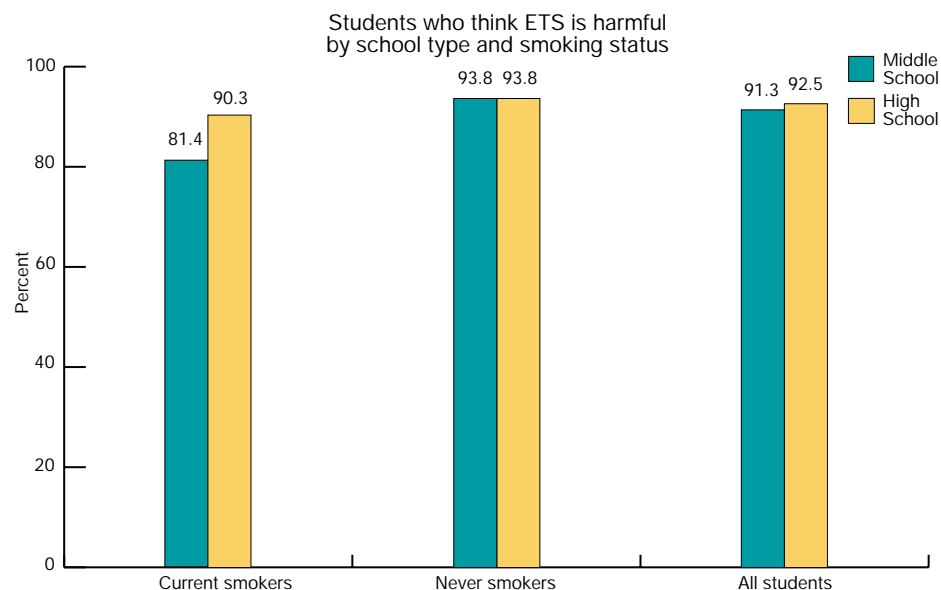
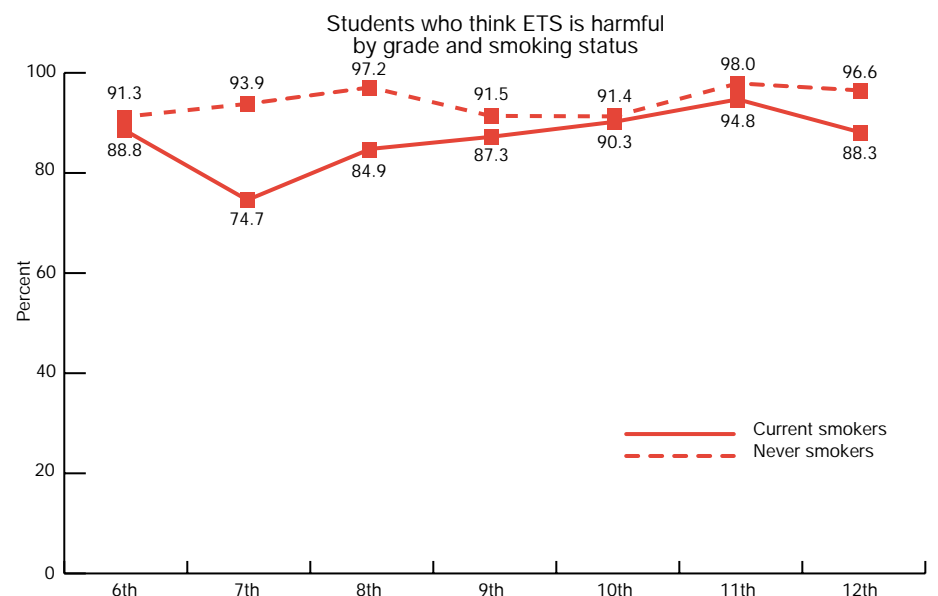


HEALTH BELIEFS ABOUT ETS

Environmental tobacco smoke (ETS or secondhand smoke) is a known human lung carcinogen and negatively impacts the respiratory health of children.* To assess their health beliefs about the dangers associated with ETS exposure, students were asked if they thought that the smoke from other people's cigarettes is harmful to them. Results displayed are for current and never smokers and all students who believe ETS is definitely or probably harmful.

- The percent of current smokers who believe ETS is harmful varies by grade between 74.7% and 94.8%. Among never smokers, the percent varies by grade between 91.3% and 98.0%
- Current smokers in 7th and 8th grade are the least likely to believe that smoke from other people's cigarettes is definitely or probably harmful to them (74.7% and 84.9%)
- Overall, more than 9 in 10 middle and high school students believe that secondhand smoke is definitely or probably harmful to them
- Current smokers in high school are significantly more aware of the harmful effects of ETS than current smokers in middle school are (90.3% and 81.4%)
- In both middle and high school, White students are more likely than Black or Hispanic students to believe that secondhand smoke is definitely or probably harmful (93.3%, 86.1%, 87.7% for middle school and 94.2%, 86.3%, 87.3% for high school) – *data not shown*
- From middle to high school, never smokers are consistent in their belief that ETS is definitely or probably harmful (93.8%)

* USDHHS. Reducing Tobacco Use: A Report of the Surgeon General. Atlanta, GA: USDHHS, CDC, NCCDPHP, OSH, 2000 / p. 48

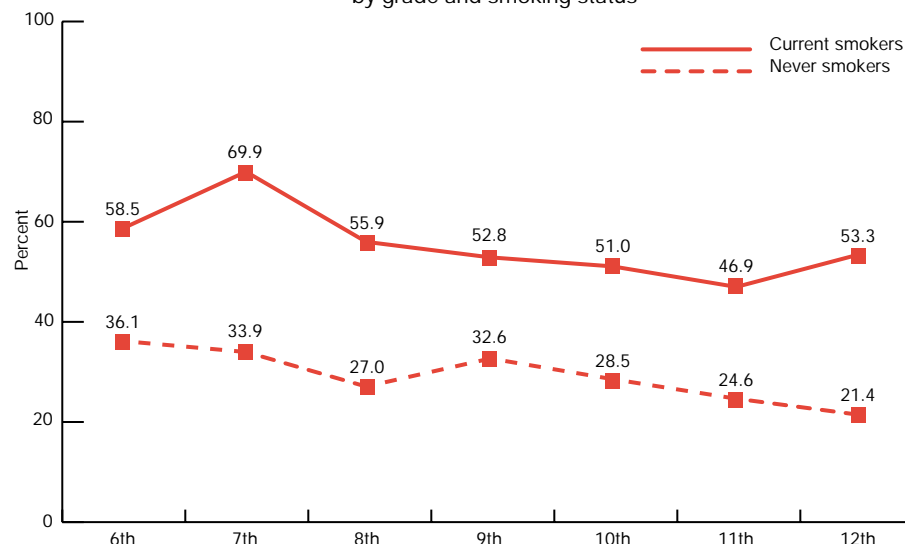


EXPOSURE TO ETS AT HOME

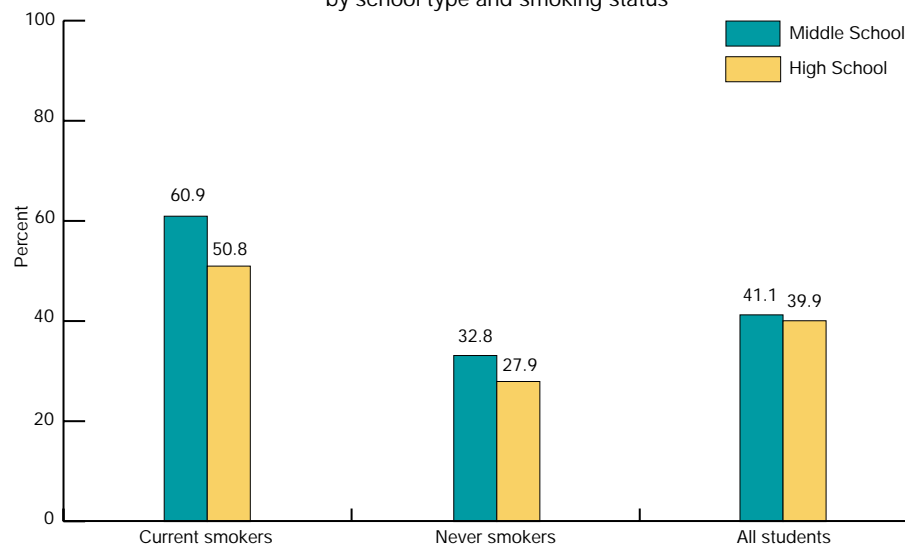
To assess how many students in Connecticut are being exposed to cigarette smoke at home, students were asked if they live with someone who currently smokes cigarettes. Results displayed here are for never smokers, current smokers and all students.

- 2 in 5 or 127,700 students in Connecticut currently live with someone who smokes cigarettes
 - 41.1% or 58,300 middle school students and
 - 39.9% or 69,400 high school students
- From 6th to 12th grade, current smokers are significantly and consistently much more likely than never smokers to live with someone who currently smokes cigarettes
- The percent of current smokers who live with someone who smokes cigarettes varies by grade between 46.9% and 69.9% and between 21.4% and 36.1% by grade among never smokers
- Current smokers in middle school and high school are almost twice as likely as never smokers to live with someone who currently smokes cigarettes (60.9% and 32.8% for middle school, and 50.8% and 27.9% for high school)
- 31,800 middle school students (32.8%) and 18,000 high school students (27.9%) who have never smoked cigarettes are being exposed to environmental tobacco smoke in their homes
- The *Healthy People 2010* objective for ETS is to reduce the proportion of children (aged 6 and younger) who are regularly exposed to tobacco smoke at home to 10% and to reduce the proportion of non-smokers (of all ages) exposed to ETS to 45%. In Connecticut, about 40% of middle and high school students live with someone who smokes

Students who live with someone who currently smokes cigarettes by grade and smoking status



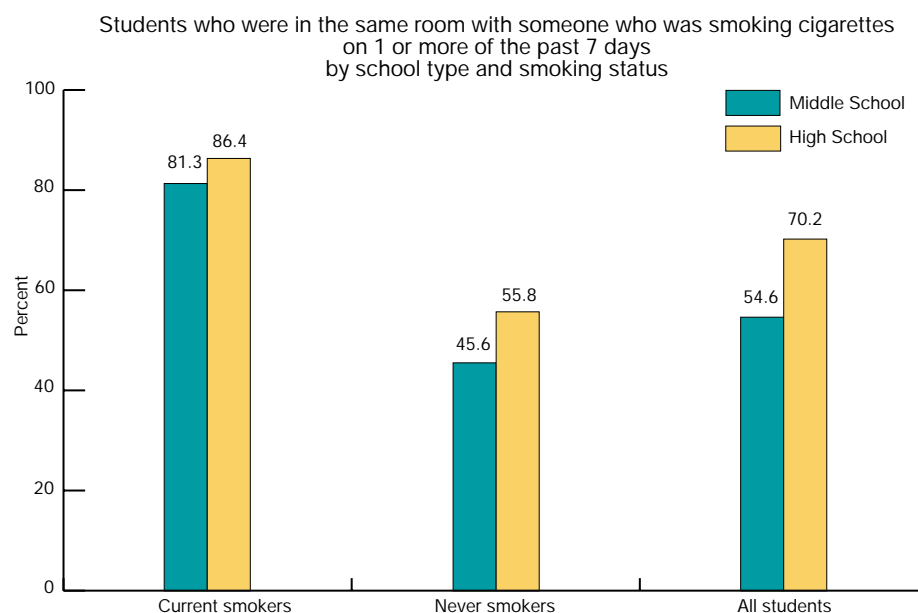
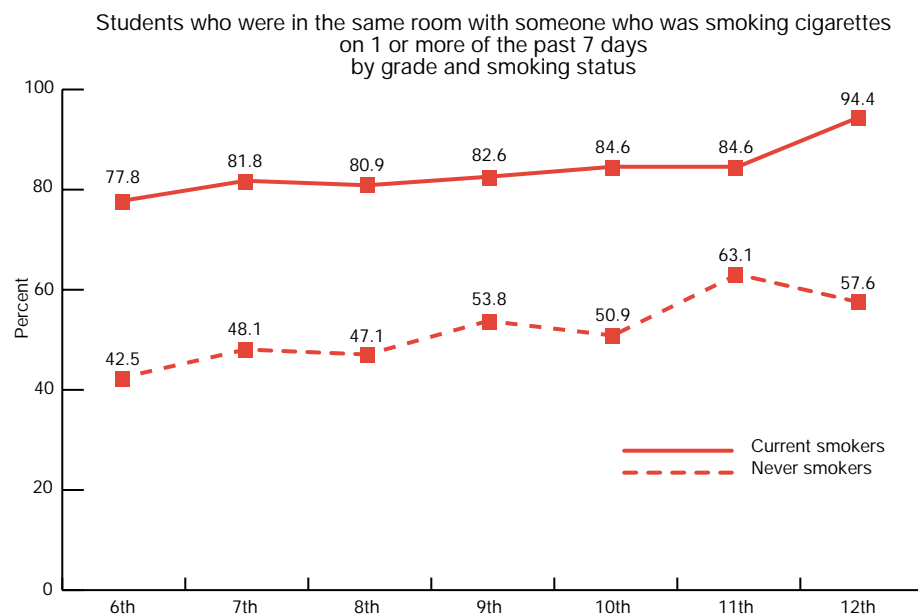
Students who live with someone who currently smokes cigarettes by school type and smoking status



RECENT PROXIMATE EXPOSURE TO ETS

To further assess student exposure to ETS, students were asked if they were in the same room with someone who was smoking cigarettes during the past 7 days. Students who reported being in the same room with someone who was smoking cigarettes during 1 or more of the past 7 days were considered to be recently exposed. Results displayed are for never smokers, current smokers and all students.

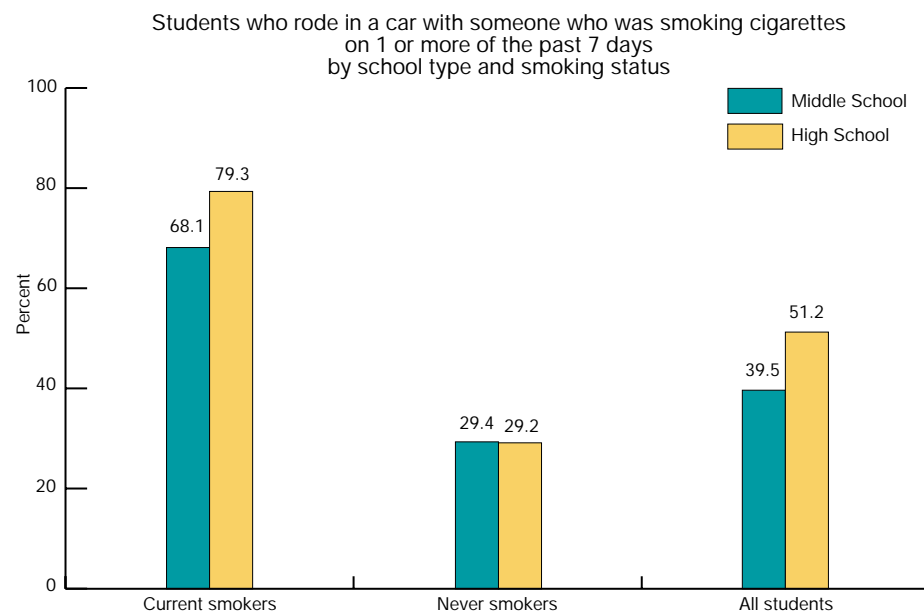
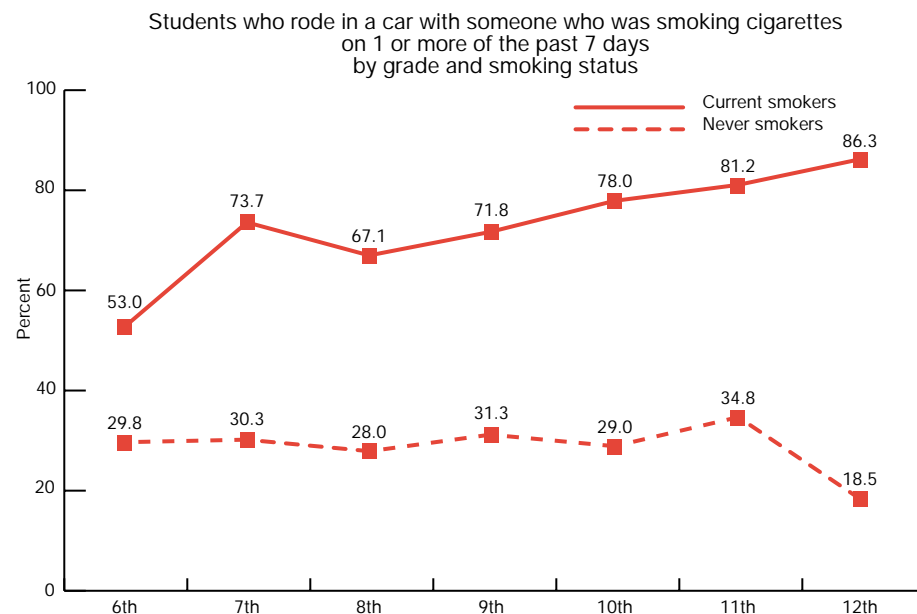
- 199,500 students in Connecticut were recently in the same room with someone who was smoking cigarettes
 - 77,400 or 54.6% middle school students and
 - 122,100 or 70.2% high school students
- From 6th to 12th grade, current smokers are significantly and consistently more likely than never smokers to have recently been in a room with someone who was smoking cigarettes
- The percent of current smokers who have recently been in a room with a smoker varies by grade between 77.8% and 94.4% and between 42.5% and 63.1% by grade among never smokers
- Middle school current smokers are almost twice as likely as never smokers to have recently been in a room with someone who was smoking cigarettes (81.3% and 45.6%)
- High school current smokers are 1.5 times more likely than never smokers to have recently been in a room with someone who was smoking cigarettes (86.4% and 55.8%)
- 44,200 or 45.6% of middle school and 35,900 or 55.8% of high school never smokers were recently exposed to cigarette smoke
- In high school, Black students are significantly less likely than Whites to have been recently exposed to ETS (61.8% and 72.7%) – *data not shown*



RECENT ETS EXPOSURE IN A CAR

Concentrations of, and exposure to, environmental tobacco smoke (ETS) are higher in confined spaces. To assess this type of ETS exposure, students were asked if they had ridden in a car with someone who was smoking cigarettes during the past 7 days. Results displayed are for all students and current and never smokers who reported riding in a car with a smoker on 1 or more of the past 7 days.

- 145,100 students in Connecticut rode in a car with someone who was smoking cigarettes on 1 or more of the past 7 days
 - 39.5% or 56,000 middle school students and
 - 51.2% or 89,100 high school students
- From 6th to 12th grade, current smokers are significantly and consistently more likely than never smokers to have recently ridden in a car with someone smoking cigarettes
 - 12th grade current smokers are almost 5 times more likely than never smokers to have recently been exposed to ETS in a car (86.3% and 18.5%)
- The percent of current smokers who have recently ridden in a car with a smoker varies by grade between 53.0% and 86.3% and between 18.5% and 34.8% by grade among never smokers
- Middle school current smokers are more than twice as likely as never smokers to have recently ridden in a car with someone who was smoking cigarettes (68.1% and 29.4%)
- High school current smokers are almost 3 times more likely than never smokers to have recently ridden in a car with someone who was smoking cigarettes (79.3% and 29.2%)
- 28,500 middle school never smokers (29.4%) and 18,800 high school never smokers (29.2%) were exposed to cigarette smoke in a car on 1 or more of the past 7 days



TECHNICAL NOTES & TABLES

SURVEY INSTRUMENT & SAMPLING DESIGN

The Connecticut Youth Tobacco Survey (CYTS) instrument is based on the core questionnaire from the National Youth Tobacco Survey administered federally by the Centers for Disease Control and Prevention. The instrument contains 65 questions that collect demographic information about the student; current and lifetime use of tobacco products including cigarettes, smokeless tobacco, cigars, pipes and bidis; cigarette use initiation and cessation attempts; tobacco sources and access; knowledge and attitudes about tobacco; exposure to tobacco advertising; and exposure to environmental tobacco smoke. Many other states are using CDC's core questions and procedures for their statewide assessments. This will provide a rich source of comparison data to complement national data.

The CYTS was conducted in both public and private, middle and high schools across Connecticut. Students were selected for the survey using a two-stage cluster design. First, all public and private schools with more than 40 students and at least one grade between 6 and 12 were listed. To ensure adequate sample sizes for Black and Hispanic students, schools were divided into 3 strata: White (student enrollment <50% Hispanic and <50% Black), Black (student enrollment ≥50% Black), and Hispanic (student enrollment ≥50% Hispanic). Schools were randomly selected from each stratum with a probability proportional to enrollment size to a sample with 80% of the schools from the white stratum, 10% of schools from the Black stratum and 10% of schools from the Hispanic stratum. In all, 58 middle schools and 56 high schools were chosen. The second stage randomly selected 2 to 4 classes within the sampled schools. Schools with predominantly Black or Hispanic enrollments were oversampled for classes to insure adequate final sample size and analytic power. All students within each selected class were given the survey; however, participation was voluntary and no individual identifying information was collected. A total of 2,089 middle school students from 41 schools and 2,200 high school students from 46 schools participated in the survey. The school response rate was 70.1% for middle school and 82.1% for high school. The student response rate was 86.4% for middle school and 74.3% for high school yielding an overall response rate (school rate x student rate) of 61.1% for both middle and high school.

Once collected, the survey data were weighted by the CDC, Office on Smoking and Health to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse at school, classroom and student-levels. Finally, a post stratification adjustment factor was calculated based on the grade, gender and race/ethnicity distribution among Connecticut students. Therefore, the data in this report are representative of all non-institutionalized, public and private, middle and high school students in Connecticut. The sampling design does not allow for analysis at the school or district level. The CDC and DPH analyzed the data using SUDAAN® (Software for the Statistical Analysis of Correlated Data) software.

DEFINITIONS

Current use is defined as any tobacco, cigarette, smokeless tobacco, cigar, pipe or bidi use by a student on one or more of the past 30 days.

Ever cigarette use is defined as any cigarette smoking during one's lifetime, even one or two puffs.

Ever tobacco use is defined as any cigarette, smokeless tobacco, cigar, pipe, or bidi use during one's lifetime.

Frequent cigarette use is defined as smoking cigarettes on 20 or more of the past 30 days.

High school students are students who were in 9th, 10th, 11th or 12th grade at the time of the survey.

Middle school students are students who were in 6th, 7th or 8th grade at the time of the survey.

Never cigarette smokers are defined as students who have never tried cigarette smoking, even one or two puffs.

Race/Ethnicity: Students were asked two questions in which they are able to self-identify their race/ethnicity. The first question asked students to choose as many of the following groups as needed to describe themselves: American Indian or Alaskan Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, and White. The second question asked them to pick which group best described them; answers to this question were used to assign race/ethnicity. For this report, three classifications were used:

White: White

Black: Black or African American

Hispanic: Hispanic or Latino

Significant differences are noted throughout the report and reflect a statistical probability of $p \leq 0.05$ that the difference seen between two categories is due to chance. Conversely, the term "no significant difference" is used when the 95% confidence intervals around the point estimates overlap making it impossible to tell whether a true difference exists.

Demographic Characteristics of Respondents

Category	Middle School		High School		Total Surveyed		State Demographics+	
	n	%*	n	%*	n	%	N	%
Gender								
Male	1023	51.8	1087	51.1	2110	49.5	142,526	51.4
Female	1056	48.2	1093	48.9	2149	50.5	135,006	48.6
Race/Ethnicity								
White	1207	73.0	1117	74.8	2324	54.2	200,609	72.3
Black	322	13.2	492	12.0	814	19.0	36,381	13.1
Hispanic	427	10.1	397	8.8	824	19.2	32,323	11.6
Other	133	3.5	194	4.0	327	7.6	8,221	3.0
Grade								
6	631	34.2	—	—	631	14.9	48,330	15.3
7	772	33.6	—	—	772	18.2	47,547	15.1
8	674	32.2	—	—	674	15.9	45,940	14.5
9	—	—	832	28.9	832	19.6	50,197	15.9
10	—	—	618	25.9	618	14.6	45,422	14.4
11	—	—	378	23.7	378	8.9	41,116	13.0
12	—	—	342	21.5	342	8.1	37,198	11.8
Age								
12 or younger	856	43.5	—	—	856	20.1	72,063	21.5
13	761	35.7	—	—	761	17.8	47,121	14.1
14	397	18.5	297	10.7	694	16.3	46,502	13.9
15	67	2.2	667	25.3	734	17.2	44,797	13.4
16	—	—	559	25.7	559	13.1	45,181	13.5
17	—	—	378	23.3	378	8.9	41,271	12.3
18	—	—	249	13.4	249	5.8	38,157	11.4
19 or older	—	—	34	1.3	34	0.8		
Total	2089		2200		4289		315,750	

*Figures represent the unweighted sample size and weighted percent

+Student gender, race/ethnicity and enrollment by grade provided by the State Department of Education. Complete information was available for all public school students (88.4% of all students); however, only enrollment by grade is collected for private school students, therefore the sum of students by grade is greater than the sum of students by gender and race/ethnicity. Age was information taken from the US Census Bureau estimates of the Connecticut population. It does not necessarily reflect the population of enrolled students.

30-Day Prevalence of Tobacco Use Among Connecticut Students by Gender, Race/Ethnicity & Grade

Middle School

Category	Any Tobacco Use		Cigarette Smoking		Cigar Smoking		Bidi Smoking		Smokeless Tobacco Use		Pipe Smoking	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Gender												
Male	14.1	3.9	9.7	3.1	7.3	2.1	4.7	1.9	2.9	1.3	2.7	1.3
Female	11.9	3.2	9.8	2.9	4.7	1.7	2.5	0.9	1.3	0.8	2.3	1.3
Race/Ethnicity												
White	10.8	2.6	8.6	2.3	4.6	1.3	2.7	1.0	1.8	1.0	1.9	1.0
Black	20.1	9.7	11.5	7.9	10.8	5.8	7.3	5.1	2.5	2.4	4.0	3.9
Hispanic	16.3	4.6	12.5	5.0	7.5	3.8	3.9	2.2	1.8	1.5	2.9	1.7
Grade												
6	4.8	2.3	2.7	2.1	1.5	0.7	1.8	1.8	0.7	0.9	1.1	1.1
7	13.5	4.1	10.1	3.2	5.5	2.2	4.2	2.2	3.5	1.4	2.4	1.6
8	20.7	6.1	16.6	5.9	11.0	3.5	4.4	2.1	2.5	1.5	4.6	2.4
Total	13.1	3.2	9.8	2.8	6.1	1.6	3.7	1.2	2.2	0.9	2.6	1.1

High School

Category	Any Tobacco Use		Cigarette Smoking		Cigar Smoking		Bidi Smoking		Smokeless Tobacco Use		Pipe Smoking	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Gender												
Male	35.3	4.5	24.9	4.9	18.2	4.7	7.5	1.8	6.2	2.0	5.4	2.0
Female	29.2	6.1	26.0	6.9	6.7	1.9	4.2	1.6	1.7	1.0	2.7	1.3
Race/Ethnicity												
White	34.4	5.3	27.6	5.7	13.2	3.0	5.3	1.5	4.3	1.1	3.4	1.2
Black	21.4	4.5	13.2	4.5	7.3	2.6	7.2	3.2	1.8	1.5	4.3	2.3
Hispanic	31.7	10.5	25.7	9.9	15.0	7.2	8.4	2.9	4.4	2.7	7.6	5.3
Grade												
9	26.9	4.0	18.8	3.9	11.7	2.7	5.9	2.1	4.0	1.9	3.6	1.1
10	32.1	6.4	22.6	7.2	12.4	4.6	8.3	2.7	5.8	2.9	6.3	2.6
11	35.9	7.0	31.3	7.5	12.9	3.3	3.9	2.3	2.4	2.0	3.1	2.4
12	36.0	10.6	31.6	9.5	13.5	6.6	5.7	3.5	3.9	2.4	3.3	3.1
Total	32.4	4.7	25.6	4.9	12.7	2.8	6.0	1.0	4.1	0.9	4.2	1.3



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